



Review of the essential works list,
nexus, efficient design and
benchmark costs for local
infrastructure

Draft Report

October 2021

Local Government »

Tribunal Members

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Invitation for submissions

IPART invites written comment on this document and encourages all interested parties to provide submissions addressing the matters discussed.

Submissions are due by Friday, 26 November 2021

We would prefer to receive them electronically via our online submission form [Lodge a submission](#)

You can also send comments by mail to:

Review of the essential works list, nexus, efficient design and benchmark costs for local infrastructure
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If you would like further information on making a submission, IPART's submission policy is available on our website.

The Independent Pricing and Regulatory Tribunal (IPART)

IPART's independence is underpinned by an Act of Parliament. Further information on IPART can be obtained from [IPART's website](#).

Acknowledgment of Country

IPART acknowledges the Traditional Custodians of the lands where we work and live. We pay respect to Elders, past, present and emerging.

We recognise the unique cultural and spiritual relationship and celebrate the contributions of First Nations peoples.

Contents

1	Introduction and executive summary	5
1.1	Overview of draft findings and recommendations	5
1.2	Our process for this review	10
1.3	How you can have your say	10
1.4	List of draft decisions	11
1.5	List of issues for stakeholder comment	12
1.6	Structure of this report	13
2	Infrastructure contributions in NSW	14
2.1	Overview of the NSW infrastructure contribution system	14
2.2	Reforms to the infrastructure contributions system	15
2.3	Our tasks	16
2.4	How our tasks interact with other proposed reforms	18
3	Overview of our proposed framework	19
3.1	Is it on the essential works list?	19
3.2	Is it development contingent?	20
3.3	Does it meet efficient design and delivery principles?	20
3.4	What costs can be included in the initial plan?	20
3.5	How and when can costs within a plan change?	21
4	Proposed changes to the essential works list	22
4.1	Our proposed EWL is principle focussed	22
4.2	Excluding works for community facilities	24
5	Developers should pay for local infrastructure when there is a nexus to the development	26
5.1	Overarching principles should guide nexus decisions	26
5.2	The approach should vary depending on the infrastructure category	28
6	Incorporating efficient design and delivery principles	35
6.1	Overarching principles to guide efficient design and delivery	35
6.2	Base level performance considering design standards and community needs including resilience to climate change	36
6.3	Providing value for money based on the most cost-effective option to meet base level performance	39
7	Benchmark costs for base level infrastructure	46
7.1	Essential works items	46
7.2	Developing infrastructure benchmarks	47
7.3	Benchmark items	47
7.4	Benchmark scopes	50
7.5	Costing	51
7.6	Adjustment for complexity	51
7.7	Project allowances	53
7.8	Alternative benchmarks for open space	55
7.9	Land costs	55
7.10	Benchmark cost for plan administration	56
7.11	Benchmark borrowing costs	58

8	Process for updating the benchmark costs over time	61
8.1	Cost escalations	61
8.2	Benchmark review	62
9	Costing approach as an alternative to using benchmark costs	64
9.1	When would councils use a costing approach rather than a benchmark cost?	64
9.2	Principles councils should follow when developing their own cost estimates	65
9.3	Governance arrangements required to support the use of these costing approaches	67
9.4	Councils need to demonstrate the costing approach was followed	68
10	Updates over the life of a contributions plan	69
10.1	Balancing the need for accurate cost recovery and certainty of costs	69
10.2	Principles for reviewing plans and updating costs	69
10.3	Which plans should be reviewed and when?	71
10.4	Updating contributions plans to reflect actual costs	73
A	Terms of reference – Review of the essential works list, nexus and efficient design	77
B	Terms of reference – review of benchmark costs	78

1 Introduction and executive summary

New development is essential to provide housing for NSW's growing population. When development occurs, local councils need to provide additional infrastructure to support both the development and the new community, such as new roads, stormwater and open space. In NSW, councils can require developers to contribute to the cost of providing that infrastructure. The NSW Government is proposing a package of reforms to the infrastructure contributions system and has asked IPART to provide advice to complement those reforms.

Contributions plans set out the local infrastructure required to meet the demand from new development, and the contributions a council can levy on developers to fund the necessary land and works.^a Currently, contributions plans with contributions above \$30,000 per lot or dwelling in identified greenfield areas and \$20,000 per dwelling in other areas must comply with an essential works list (EWL) and other criteria set out in the Department of Planning and Environment's Infrastructure Contributions Practice Note (2019 Practice Note).

We have been asked to provide advice to inform two key areas of the Government's reforms under two separate terms of reference:

- an EWL that would apply to all section 7.11 contributions plans and the approach councils should use to determine the most efficient local infrastructure to meet the needs of new development, applying the principle of nexus
- standardised benchmark costs for local infrastructure that councils may use to prepare local contributions plans that reflect the efficient costs of provision.

This review is not about telling councils what type or standard of local infrastructure they should invest in to meet the needs of their communities. Our advice covers the contributions that councils can recover from developers for base level infrastructure. Where communities demand higher levels of service, councils may elect to deliver these services via funding from voluntary agreements, the broader ratepayer base, or possibly via grants.

1.1 Overview of draft findings and recommendations

We consider that the circumstances of each community are different and a flexible, principled approach is needed. This is consistent with the NSW Productivity Commission's recommendations for a principles-based approach to enhance the efficiency of the infrastructure contributions system and make it more accessible, more consistent and simpler to administer.

In our view, a common set of principles should be applied to all circumstances including metropolitan and regional areas as well as infill and greenfield developments. This provides for councils to tailor infrastructure needs to each community and ensures that developers only pay for base level infrastructure associated with new development.

^a Section 7.11 of the Environment Planning and Assessment Act 1979 allows councils to levy contributions towards the cost of providing local infrastructure.

1.1.1 A principles-based framework is needed to meet community needs

We have developed a principles-based framework that would allow councils to assess what infrastructure can be included in a contributions plan and at what cost. The framework comprises 5 main components:

1. The items included in the contributions plan must be on the essential works list.
2. The items must be development contingent.
3. The costs in the plan must be based on the cost of base level infrastructure that meets efficient design and delivery principles.
4. If there is a relevant benchmark cost, that should be used unless it would not be reasonable to do so. Where a benchmark is not used, the council should apply the costing approach outlined in our report.
5. Plans may be updated to reflect actual costs during the life of the plan, in some circumstances. Where this is not reasonable, the plan may continue to reflect an updated cost estimate.

Our proposed framework is designed to build on processes that councils should already have in place for identifying the needs of their community and deciding how best to meet them. It draws on our experience in assessing contributions plans above the current thresholds. However, we consider that it is flexible enough to be applied to all contributions plans.

1.1.2 Small changes to the essential works list to better meet objectives

We are proposing changes to the way the EWL is expressed to better achieve the aims of the Government's contributions reforms and ensure the process is guided by clear and consistent principles.

We have moved the requirement for base level embellishment of open space out of the EWL itself and into the assessment of efficient design and planning. The 2019 Practice Note defines base level embellishment of open space as those works required to bring the open space up to a level where the site is secure and suitable for passive or active recreation.^b

Our proposed approach recognises that the concept of 'base level' applies to more than just open space embellishment. In addition, we consider that it is not possible to determine what base level infrastructure is without considering the circumstances in which it is being delivered.

This approach is consistent with the principles we have applied when assessing contributions plans that have come to us for review. An infrastructure item being listed on the EWL is not sufficient for inclusion in a contributions plan. Further justification has always been required.

^b The 2019 Practice Note states that base level embellishment may include site regrading, utilities servicing, basic landscaping (turfing, asphalt* and other synthetic playing surfaces planting, paths), drainage and irrigation, basic park structures and equipment (park furniture, toilet facilities and change rooms, shade structures and play equipment), security lighting and local sports field floodlighting, sports fields, tennis courts, netball courts, basketball courts (outdoor only), but does not include skate parks, BMX tracks and the like. It also notes that 'asphalt' (under 'basic landscaping') includes at-grade carparks to the extent that they service the recreation area only and does not include multi-storey carparks

Under our draft recommendations, only cost-effective infrastructure that provides the minimum (or base level) of service can be included in a contributions plan. This is to ensure developers only pay for the efficient cost of infrastructure. It is important to note that we are not removing the concept of base level embellishment, we are just moving it within the overall framework.

Our terms of reference states that works for community facilities must not be included in the EWL and the EWL is to be suitable to apply to all contributions plans, not just those plans above the current contribution thresholds. Applying the EWL to all contributions plans would mean that no councils would be able to include funding for building community facilities.

During our workshop consultations, developers supported this position as they consider the costs of local infrastructure contributions are already high. However, councils advised us that community facilities are essential for their communities, and that excluding these capital costs from the EWL may mean they cannot afford them from rates revenue. Councils considered that excluding community facilities from contributions plans may prevent more cost-effective solutions from being implemented and may result in poorer outcomes for communities.

1.1.3 Applying the principle of nexus

Nexus refers to the relationship between the expected types of development and the demand for additional public facilities created by that development. The requirement to establish nexus between development and proposed new infrastructure will remain a central part of a reformed developer contributions system.

We consider that 3 overarching principles should guide decision making in contribution planning as it relates to nexus:

1. That the expected development creates a demonstrable increase in the demand for public amenities and services.
2. That the types of public facilities proposed in the contributions plan are required to address that demand, having regard to the characteristics, needs and preferences of the new development/population.
3. That the proposed facilities consider the extent to which existing facilities have capacity to meet that demand.

While we consider that these overarching principles should guide decision making, we recognise that in practice, the approach councils take to establishing nexus for new or upgraded infrastructure may vary by infrastructure category. This recognises that different approaches are appropriate for different infrastructure categories, to reflect how they are planned and designed and the different challenges they present. It also reflects the current approach we take to assessing nexus, which we have codified into a set of proposed requirements for establishing and demonstrating nexus for infrastructure in a contributions plan. We have also provided guidance on different examples that can inform decisions on nexus.

1.1.4 Efficient design and planning principles and base level infrastructure

Ensuring infrastructure is efficient is a central part of any precinct planning process. Efficient infrastructure not only reflects minimum applicable standards, but also meets community needs and provides value for money.

We consider that 2 overarching principles should guide decision making in contributions planning as it relates to efficient delivery and design:

1. That the infrastructure delivers a base level of performance having regard to any relevant government regulations or industry standards and community needs.
2. That the council provides value for money by selecting the most cost-effective option for delivering the base level of performance – not necessarily the option with the lowest up-front cost.

We have moved the assessment of base level embellishment out of the EWL and into this part of the framework. It is difficult to define base level embellishment of open space without considering the circumstances and context in which it is being delivered. What is base level can differ between communities and their specific characteristics and needs, which change over time. As 'base level' is context-specific, it appropriately sits as part of the assessment of nexus and efficient cost.

We consider that base level performance is the minimum functionality needed to deliver a required outcome for infrastructure on the EWL.

Our proposed approach does not specifically include or exclude any items from a development plan. Rather councils need to demonstrate that the level of infrastructure proposed in the contributions plan is the minimum needed to meet the performance outcome based on its assessment of community needs.

If our review was to include or exclude individual items from base level embellishment it would prevent councils from providing infrastructure where needs evolve over time. The additional flexibility to define base level on a case-by-case basis will also support councils in adopting more innovative and cost-effective ways to meet community needs.

Our proposed approach does not prevent councils from providing a higher level of infrastructure. However, funding for the additional cost of this would need to be obtained through other mechanisms such as voluntary funding agreements, special rate variations, or in-kind works rather than developer contributions.

1.1.5 Benchmarks and costing methods set out the quantum of costs that can be included in plans

Under the Government's proposed reforms, costs to be levied through a contributions plan will be determined either by using standardised benchmarked costs or by using a site-specific costing approach, including actual costs once construction has commenced. We have engaged a consultant, Cardno (NSW/ACT) Pty Ltd (Cardno), to advise on the development of the benchmarks. This report outlines the method Cardno is using to prepare its advice on the benchmark scopes and cost information and Cardno's advice will be released in November.

We consider that a system of benchmarks should allow for flexibility and complexity. In most cases, we expect councils will be able to use the benchmark costs for infrastructure items. However, there will be instances where the benchmarks we have developed are either unsuitable or unavailable and we have asked Cardno to advise on circumstances where the council would need to develop their own cost estimates, and how they should do so.

The selection and use of a costing approach used by councils should be underpinned by principles recommended in this report:

1. Contributions plans should include benchmark costs unless the council has reason to believe that the benchmark would not provide a reasonable estimate of the efficient costs of base level, development contingent infrastructure.
2. If the council intends to use an alternative cost estimate rather than use one of the benchmark costs for an infrastructure item, the scope and performance outcomes of the infrastructure item should be the same as the benchmarked estimate. That is, unless the council can demonstrate that the altered scope and/or outcome is consistent with base level infrastructure.
3. Councils should take a symmetric and proportionate approach to replacing benchmarks with alternative costings. This means a council would replace a benchmark where the alternative approach would lead to a materially more accurate cost estimate than the benchmark, whether that estimate is higher or lower than the benchmark.

We have also proposed several governance arrangements around the use of specific estimates or actual costs to support the above principles. We consider that councils should be required to provide a detailed outline of its method for estimating costs. This should include an explanation of why and how the costing approach is a more accurate estimate of the efficient costs of the base level infrastructure than the benchmarks.

1.1.6 Guidance on how and when can costs within a plan change

Once a contributions plan has been prepared using benchmarks or cost estimates, it may require updating over its lifetime. Updates would be necessary to maintain currency and ensure the costs in the plan continue to remain cost reflective. Yet the need for cost reflectivity must be balanced with the need for certainty of costs and the effort of updating a plan.

Our proposed approach is that all relevant contributions plans be reviewed at a fixed 4-year period. The review should aim to improve the accuracy of the plan, by updating the figures based on more up to date information such as actual costs (if construction has commenced), site-specific costs and revised population estimates. We consider this approach strikes an appropriate balance between efficiency and certainty, and it reflects our current practice of recommending actual costs be incorporated into contributions plans if construction has commenced.

We have also recommended a principles-based approach to updating costs to ensure they maintain current and efficient costs over the lifetime of a contributions plan. These principles include:

- updated costs should only reflect the efficient cost of meeting required performance outcomes
- actual costs should reflect optimal design and practices

- councils should provide justification for any increases to their costs as a result of plan reviews
- councils should update for both material increases and decreases in costs
- any contingency allowance for an infrastructure item should be adjusted to reflect the stage of project planning
- developers should pay no more than their share of efficient costs (based on nexus and apportionment principles) and councils should not over-recover their efficient costs over the life of the plan.

In order to demonstrate that they have followed the above principles, we consider that councils should provide requisite information that explains the sources and reasons for any material changes to costs and developer contributions. We also propose that when reviewing a plan, in addition to updating costs, council should review its earlier assumptions about population, developable area and number of developable lots or dwellings, as these factors are central in determining developer contributions.

1.2 Our process for this review

As the issues that are the subject of this review have been previously canvassed through the work of the NSW Productivity Commission and the Government's response to its recommendations, our terms of reference indicated that an issues paper was not required for this review. However, to date we have collected information, conducted public consultation and done detailed analysis:

- We held 4 stakeholder workshops with councils, developers and other interested stakeholders to seek feedback on the essential works list, nexus and efficient design principles.
- We engaged Cardno to provide expert advice on benchmark costs and costing methods.

An updated timetable for our review is available on our [website](#).

1.3 How you can have your say

We are seeking written submissions on this Draft Report and encourage all interested parties to comment on the draft findings and recommendations that it discusses, or any other issue relevant to the review. Page ii of this report provides more information on how to make a submission. Submissions are due by 26 November 2021. We will also hold a public hearing and further meetings during November 2021. Further information is available on IPART's website.

1.4 List of draft decisions

Draft decisions

1.	Costs included in a section 7.11 contributions plan should relate to provision of local infrastructure in one or more of the following categories:	24
	<ul style="list-style-type: none"> – land and/or facilities for open spaces – land or strata space for community facilities – land and/or facilities for transport – land and/or facilities for stormwater management – costs of plan preparation and administration – borrowing costs to forward fund infrastructure. 	
2.	Costs included in a section 7.11 contributions plan should relate to provision of development contingent local infrastructure. Proposed items will be development contingent where:	34
	<ul style="list-style-type: none"> – The expected development creates a demonstrable increase in the demand for public amenities and services. – The types of public facilities proposed in the contributions plan are required to address that demand. – The proposed facilities consider the extent to which existing facilities have capacity to meet that demand. 	
3.	Costs included in a section 7.11 contributions plan should reflect the base level, efficient local infrastructure required to meet the identified demand. Proposed items will satisfy these requirements if:	44
	<ul style="list-style-type: none"> – They deliver the minimum level of performance required to meet the identified need and comply with government regulations or guidelines and industry standards. – They provide value for money compared with the different options available for meeting the identified need, with costs and benefits considered over the life of the assets proposed. 	
4.	We will establish cost standardised benchmark scopes and base costs for the items listed in Table 7.1. Our approach will incorporate variation in the appropriate costs using base costs and adjustment factors.	52
5.	We recommend project allowances to applied to base costs at the rates proposed under Table 7.3 and Table 7.4.	54
6.	The benchmark cost for plan administration should be set at 1.5% of the total value of works to be funded by local infrastructure contributions. This should cover the total costs of plan preparation, management, and administration.	58
7.	IPART should annually update the benchmarks to account for cost escalations using the ABS Producer Price Indexes for construction in Table 8.1, and publish the escalated benchmarks on its website.	63
8.	IPART should review the set of benchmarks no less frequently than every 4 years and should carefully monitor the use of benchmarks in contributions plans to determine if an earlier review is required.	63
9.	IPART should work with DPIE and councils to establish a mechanism for obtaining actual project costs to refine the benchmarks.	63
10.	We recommend that councils provide appropriate justification, consistent with the principles described in chapter 9, when using cost estimates instead of benchmarks.	68

11.	We recommend that councils use either a top down or bottom up approach to estimating costs that uses the most accurate information consistent with the methods described in chapter 9.	68
12.	We recommend all contributions plans above the threshold amounts (\$20,000 / \$30,000 per lot infill / greenfield) be reviewed every 4 years consistent with the principles outlined in Table 10.1 , with appropriate evidence to support the reviews as described above.	72

1.5 List of issues for stakeholder comment

Seek Comment

1.	Do you think our proposed principles-based approach to the EWL, as part of our broader framework incorporating efficient design and delivery and benchmark costs, provides enough certainty? Have we got the balance right between flexibility and certainty?	24
2.	Is the proposed evidence to establish nexus for infrastructure in a contributions plan appropriate and reasonable? Is there any other guidance on nexus for local infrastructure that should be included in an updated practice note to assist councils, developers and other stakeholders in preparing and assessing contributions plans?	34
3.	What further guidance on base level, efficient local infrastructure should be included in an updated practice note to assist councils, developers and other stakeholders in preparing and assessing contributions plans? How definitively should the guidance in an updated practice note specify the standards expected of infrastructure (e.g. legislation and other industry standards)?	45
4.	Are there other items that we should consider benchmarking?	52
5.	Do you agree with our approach to use adjustment factors so that the benchmarks are applicable to a broader range of projects?	52
6.	What other factors increase the complexity of a project that could be used as an adjustment factor?	52
7.	We seek stakeholder views on the approach to project allowances, including the rates and their application	54
8.	We seek stakeholder views on alternative benchmarks for open space. Is there value in a per person benchmark? How would it work?	55
9.	Does 1.5% of the total value of works excluding land broadly reflect the actual cost councils face to administer a contributions plan? If not, what percentage would better reflect the actual cost councils face?	58
10.	What other types of information or data would provide a clear evidence base for the true costs of plan administration?	58
11.	We seek views on our proposed approach to annual escalations and 4 yearly reviews of benchmarks, including the choice of index and timeframe.	63

12.	We seek views on an appropriate feedback or data collection mechanism to obtain reliable and consistent project information to refine the benchmarks over time.	63
13.	Are the proposed principles and information requirements for councils using an alternative costing approach adequate? Should councils be required to provide any further information to justify deviations from the standard benchmark costs?	68
14.	Are the proposed principles for reviewing plans and updating costs adequate? Are there any principles that should be removed from or added to this list?	71
15.	Are the proposed information requirements for councils enough? Are there any other pieces of information that should be added to this list?	71
16.	Do you support our approach for a threshold to determine which plans must be reviewed?	72
17.	Do you support our proposal for a fixed 4 yearly review of contributions plans?	72
18.	Does the annual update and four-yearly review provide an appropriate balance between cost reflectivity and certainty?	75

1.6 Structure of this report

The following chapters provide more information on this review, our approach and our draft recommendations:

- Chapter 2 sets out a brief overview of the NSW infrastructure contribution system, further background and context for our review
- Chapter 3 explains our proposed framework that councils would apply to assess what infrastructure can be included in a contributions plan, and at what cost
- Chapter 4 outlines our proposed changes to the EWL
- Chapter 5 describes how councils should demonstrate nexus
- Chapter 6 explains our advice about how councils should incorporate efficient design and delivery into precinct and infrastructure planning
- Chapters 7 to 9 outline relevant benchmark costs and costing approaches that should be used to calculate the quantum of costs to be included in plans
- Chapter 10 explains our advice on how plans may be updated to reflect actual costs during the life of the plan.

2 Infrastructure contributions in NSW

As background and context for our review, this chapter provides a brief overview of the NSW infrastructure contribution system. We summarise recommendations from the NSW Productivity Commission's review of the infrastructure contribution system, which is the impetus for this review. Finally, we outline the specific tasks we have been asked to consider as part of our terms of reference, which have an important bearing on our approach to this review, and how we see these tasks interact with the proposed reforms to the infrastructure contribution system.

2.1 Overview of the NSW infrastructure contribution system

Infrastructure contributions are payments made by developers that help deliver infrastructure needed to support their developments. They are a key source of funding for councils and the NSW Government to deliver local, regional and state infrastructure to support our communities.

There are two types of infrastructure funded by developers:

- local infrastructure (including local roads, stormwater management, community facilities and open space, for example)
- state and regional infrastructure (including schools, hospitals, state and regional roads, public transport infrastructure, emergency services, for example).

The focus of this review is local infrastructure. Local infrastructure contributions are generally collected by councils using one of the options available to them under the *Environmental Planning and Assessment Act 1979* (EP&A Act):

- section 7.11 local infrastructure contributions
- section 7.12 local infrastructure contributions
- planning agreements.

Section 7.11 contributions are the focus of this review. A section 7.11 contribution is a contribution (either monetary, land or in some cases works in kind) for the provision or extension of infrastructure where development creates the need for that infrastructure. The contribution is determined by 2 key concepts:

1. establishing a **nexus** between the development and the infrastructure (the increased demand for infrastructure the development has created)
2. sharing the costs of infrastructure between councils and developers based on the share of the total demand that each development creates (called **apportionment**).

Councils can only charge section 7.11 contributions if they have prepared and adopted a contributions plan for an area.

Currently, if a council wishes to charge a contribution above \$30,000 per lot or dwelling in identified greenfield areas and \$20,000 per dwelling in other areas, IPART must review the plan. IPART reviews contributions plans against the criteria outlined in the 2019 Practice Note.

Contributions plans that levy above the caps must comply with an essential works list (EWL). The current EWL sets out the land and works that developers must fund in new or growing communities (see **Box 2.1**).

Box 2.1 Current essential works list

- Land for open space (for example parks and sporting facilities) including base level embellishment
- Land for community services (for example childcare centres and libraries)
- Land and facilities for transport (for example, road works, traffic management and pedestrian and cyclist facilities) but not including carparking
- Land and facilities for stormwater management
- The costs of plan preparation and administration.

The 2019 Practice Note also provides guidance about what is considered base level embellishment.

Source: DPIE, Practice Note, Local Infrastructure Contributions, January 2019, pp 14-15.

Section 7.12 contributions are an alternative to section 7.11. They are a percentage levy based on the cost of development. Section 7.12 contributions are mostly applied in regional areas and established areas where future development is difficult to predict.

Planning agreements under section 7.4 of the EP&A Act can be entered into in addition or as an alternative to s7.11 and s7.12 contributions. Planning agreements can provide greater flexibility to address the infrastructure needs of proposed development.

2.2 Reforms to the infrastructure contributions system

In April 2020 the Minister for Planning and Public Spaces requested the Productivity Commission conduct a comprehensive review of the infrastructure contributions system in NSW. The review was to determine whether this system meets the objectives of certainty and efficiency while delivering public infrastructure to support development.

The NSW Productivity Commission made recommendations for reform that were outlined in a Final Report released in November 2020.¹ Of relevance to local infrastructure contributions and this review, these recommendations included:

- moving towards a principles-based infrastructure contributions system based on certainty, efficiency, simplicity, transparency and consistency
- striking a balance between efficiency, simplicity and certainty for local infrastructure contributions, including:
 - IPART developing and maintaining standardised benchmark costs for local infrastructure that reflect the efficient cost of provision
 - applying the essential works list to all section 7.11 contributions plans

- IPART reviewing the essential works list and providing advice on the approach to considering efficient infrastructure design and application of nexus
- removing the monetary trigger for review of contributions plans and instead have IPART review plans on an exception basis
- encouraging councils to forward fund infrastructure.

In March 2021, the NSW Government confirmed it had accepted all 29 recommendations in the Final Report.²

This review concerns the Productivity Commission's recommendation that IPART review the essential works list and advise on the approach to considering efficient infrastructure design and application of nexus. In a separate but concurrent review, we are reviewing benchmark costs for local infrastructure that reflect the efficient cost of provision.

2.3 Our tasks

As noted in chapter 1, this report covers two separate but related reviews, each with their own terms of reference.

2.3.1 Essential works list, nexus and efficient design review

Our terms of reference ask us to deliver:

- A review of the essential works list for efficiently designed development-contingent cost to determine the contents of the essential works list. This would apply to all section 7.11 contributions plans.
- A report providing advice on the approach councils should use to determine the most efficient local infrastructure to meet the needs of new development, applying the principle of nexus.

Our report should include the evidence and documentation required to demonstrate that local infrastructure included in a contributions plan is contingent on development and efficient in design.

In delivering our report we have been asked to have regard to:

- the NSW Productivity Commission's recommendations in relation to:
 - the principle that local contributions are cost-reflective charges on impactors, applied through a consistent framework but with some flexibility for adaption to local circumstances
 - infrastructure planning as part of the strategic planning process to encourage early identification of infrastructure needs and optimisation of infrastructure costs
- our review of the local government rate peg to allow councils' general income to increase with population
- the essential works list must not expand beyond the current parameters and community facilities works must not be included

- differential infrastructure needs to reflect geographic issues (metropolitan vs regional) and development typologies (infill vs greenfield).

2.3.2 Benchmarking and costing approach review

Our terms of reference require us to recommend:

- standardised benchmark costs for efficiently designed, development contingent, base level infrastructure on the EWL covering transport, stormwater and open space needs for infill, greenfield and regional developments
- standardised benchmark cost or costing approach for local infrastructure plan preparation and administration costs
- standardised allowances for inclusions such as contingency, project management and design
- a costing approach councils' should use to estimate base level infrastructure costs not derived from the benchmarks
- differential costs to reflect geographic issues or development typologies for the same types of infrastructure.

In making our recommendations we have considered the Productivity Commission's findings. The full terms of reference is available on the [review page](#) of our website.

To enable success of the reformed system, our review must deliver recommendations that resolve some key challenges. These include:

- delivering a system of benchmarks that balance the principles of efficiency, simplicity and certainty
- setting benchmarks in a way that remains efficient while maintaining relevance to a range of settings
- providing a costing approach to use as an alternative to benchmarks
- providing guidance on the appropriate use of benchmarks, site-specific estimates and actual costs
- define principles to determine base level infrastructure and embellishment
- plan how to review benchmarks to maintain currency.

2.4 How our tasks interact with other proposed reforms

Under the existing arrangements for infrastructure contributions, IPART has been issued a terms of reference under section 9 of the *Independent Pricing and Regulatory Tribunal Act 1992* to independently assess high value contributions plans against criteria set out in the 2019 Practice Note.

The NSW Productivity Commission recommended that terms of reference be developed for IPART to instead review plans on an a 'by exception' basis, with the option of a 'targeted' review of specific sections of a plan.³ The Commission also recommended that a practice note be prepared to reflect the 'by exception' review process and requirements for local contributions plans, including guidance on:

- the updated essential works list for development-contingent infrastructure
- how nexus should be established for infrastructure in a plan
- how costs should be apportioned
- how efficient costs should be determined including when to use benchmark costs, specific estimates or actual efficient costs
- the required content of contributions plans, including the information that must be made publicly available to demonstrate how costs are determined (for example, the scope, cost and procurement process for each infrastructure item in a plan).⁴

Under the exception-based review model recommended by the Productivity Commission, if affected parties are of the view that the council has not met the requirements for contributions plans, they could apply to have the plan reviewed by IPART. We expect that the applicant would be required to establish:

- how a contributions plan does not meet the required methodology, criteria or legislative provisions
- that this has a material impact on contribution rates in the plan.

These requirements would ensure that review occurs only where it is sufficiently justified.

Our expectation is that the updated practice note, to be issued by DPIE, would set out IPART's and the Minister's role, the process for review of contributions plans and the relevant assessment criteria.

Our advice under the current reviews supports this model by providing enhanced guidance to councils and other stakeholders upfront, in terms of the principles, methods and criteria that contributions plans should comply with. Clarity around these requirements will benefit all stakeholders, including councils.

We envisage that IPART guidance and the DPIE practice note would need to be updated over time. Updates would reflect changes in legislation, standards and community needs, such as accessibility requirements or health and safety risk management related to bushfires, floods and the COVID pandemic. Regular proactive revision of both the IPART guidance and the DPIE practice note would provide councils with clear up-to-date guidance and minimise the potential for disputes to arise.

3 Overview of our proposed framework

This section brings together our draft decisions and provides an overview of the proposed framework that councils would apply to assess what infrastructure can be included in a contributions plan, at what cost, and how this would be updated over time.

Our proposed framework is designed to be principles-based rather than prescriptive and to be able to be applied by all councils across NSW, irrespective of location or development type. As the circumstances of each community are different and change over time, we consider that a flexible approach is needed to deliver the best outcome for the people of NSW.

We have proposed a framework that can be applied consistently to a range of different circumstances. It is designed to build on processes that councils already have in place for identifying the needs of their community and deciding how best to meet them. In developing the approach, we tested a range of different scenarios to ensure that the proposed approach leads to sensible and desirable outcomes. We will seek feedback on this approach before finalising our decisions.

below outlines the components of our proposed framework as well as their relationship to the 2 reviews that are included in this report.

Figure 3.1 Overview of our proposed framework



Source: IPART.

Our proposed framework is set out in more detail below.

3.1 Is it on the essential works list?

To include the cost of land and/or works in a contributions plan, the council must show that they fall into at least one of the categories on the essential works list (EWL).

We have been asked to review the EWL and consider whether changes are required to ensure it is appropriate to a range of different circumstances. However, our terms of reference for this review specify that the EWL must not expand beyond the current parameters and community facilities works must not be included.

Our proposed EWL is set out in chapter 4 of this report. We are proposing some changes to the way the EWL is expressed in order to better achieve the aims of the contributions reforms and ensure the process is guided by clear and consistent principles.

3.2 Is it development contingent?

To include the cost of land and/or works in a contributions plan, councils must demonstrate nexus (the relationship between the expected types of development and the demand for additional public facilities created by that development).

Our overarching principles for nexus are:

- The expected development creates a demonstrable increase in the demand for public amenities and services (reflecting the characteristics, needs and preferences of the community).
- The types of public facilities proposed in the contributions plan are required to address that demand.
- The proposed facilities consider the extent to which existing facilities have capacity to meet that demand.

Further detail and guidance on nexus is set out in chapter 5.

3.3 Does it meet efficient design and delivery principles?

To include the cost of land and/or works in a contributions plan, the council must show that it has considered a range of options and identified the most efficient approach to meeting the demand identified.

The overarching efficiency principles are that the combination of land and works:

- Delivers a base level of performance having regard to any relevant government regulations or industry standards and community needs.
- Provides value for money by selecting the most cost-effective option for delivering the base level of performance – not necessarily the option with the lowest up-front cost.

It is important to draw these principles out as a separate step of the process, as this assessment is critical to achieving the government's reform objectives. Efficient design and delivery principles are discussed in chapter 6 of this report.

3.4 What costs can be included in the initial plan?

To determine what costs can be incorporated into the plan, councils must base the costs on the base level, efficient infrastructure identified.

Our intent is not to compel a council to deliver this level of infrastructure if it has other competing objectives (such as a higher level standard for the rest of their local government area (LGA)-s but in that case, they will be required to fund the additional cost through other means.

Principles for costs included in a contributions plan include:

- If we have established a benchmark for an infrastructure item, the council should use that benchmark unless it would be unreasonable to do so (for example, there are specific site conditions that mean the benchmark is not a good reflection of the cost of providing the infrastructure, such as chemical contamination).
- If there is no benchmark for an infrastructure item and/or the available benchmark is not a reasonable approximation of the cost for that item then the council should use the costing approach outlined in our associated benchmarking report to estimate the cost for that item.

The intent of the benchmarks is to reduce councils' expenses in estimating the costs in plans. However, one of the overriding aims of the framework is to identify areas of high infrastructure cost in advance and ensure that these costs are factored into the decision to develop. In some cases, adopting the benchmark cost would not meet this aim. Flexibility to allow councils to identify cases when benchmarks are not likely to provide a reasonable cost estimate is needed.

More information on the principles for costs included in a contributions plan is provided in chapters 7 and 9 of this report.

3.5 How and when can costs within a plan change?

As councils begin to purchase land and build infrastructure, they will have increasing certainty about what it will actually cost to deliver the infrastructure included in the contributions plan. We have been asked to develop a costing approach that councils should use for any base level infrastructure costs that are not derived from the standardised benchmark costs including, when actual costs based on efficient base level design are determined following construction.

The trade-off between accurate cost recovery and certainty is challenging, and in some instances the cost of updating plans may outweigh benefits. A practical and flexible approach to implementation is therefore needed.

Our approach aims to ensure that councils can recover efficient, base level costs for items on the essential works list, for which they have established nexus to the development.

The principles that apply in updating costs in a contributions plan are:

- updated costs should only reflect the efficient cost of meeting required performance outcomes
- actual costs should reflect optimal design and practices
- councils should provide justification for any increases to their costs as a result of plan reviews
- councils should update for both material increases and decreases in costs
- any contingency allowance for an infrastructure item should be adjusted to reflect the stage of project planning
- developers should pay no more than their share of efficient costs (based on nexus and apportionment principles) and councils should not over-recover their efficient costs over the life of the plan.

More information on these principles is provided in chapters 8 and 10 of this report.

4 Proposed changes to the essential works list

As outlined in chapter 2, the Government has asked us to review the contents of the EWL that would apply to all section 7.11 contributions plans. This chapter provides our draft recommendations on the contents of the EWL.

4.1 Our proposed EWL is principle focussed

We are proposing small but important changes to the way the EWL is expressed in order to better achieve the aims of the contribution reforms, and ensure the process is guided by clear and consistent principles.

Our proposed EWL is summarised in **Box 4.1**.

Box 4.1 Proposed essential works list

- Land and/or facilities for open spaces
Land or strata space for community facilities
- Land and/or facilities for transport
- Land and/or facilities for stormwater management
- The costs of plan preparation and administration
- Borrowing costs to forward fund infrastructure.

Compared to the current EWL, our key changes include:

- removing the requirement that embellishment of open space be 'base level' and instead consider this as part of the nexus and efficiency assessments
- including strata space for community facilities
- including borrowing costs.

These changes are discussed further below.

4.1.1 Removing base level embellishment of open space

Our draft recommendation is to remove base level embellishment of open space from the EWL, and instead consider this as part of the nexus and efficiency assessments.

Under our terms of reference, only cost-effective infrastructure that provides the minimum (or base level) of service can be included in a contributions plan. It is important to note that we are not removing the concept of base level embellishment, we are just moving it within the overall framework.

We consider that it is not possible to define base level embellishment of open space without considering the circumstances and context in which it is being delivered. What is base level can differ between communities and their specific characteristics and needs, which change over time. Assessing base level embellishment as part of an EWL, without the broader context, creates a risk that decisions are arbitrary and unprincipled. As 'base level' is context-specific, it appropriately sits as part of the assessment of nexus and efficient cost. This is consistent with how base level is considered for other items on the EWL, and with how IPART has undertaken these assessments in practice.

Our proposal aligns with stakeholder views that the framework needs to be flexible enough to cater for changing views about what is essential infrastructure over time. By avoiding ruling items in or out based on the list, it provides more opportunity for innovative and cost-effective solutions to be identified and put forward by councils.

Our terms of reference state that we must not expand the existing EWL. We consider that our proposal is consistent with this requirement. As noted above, our proposal is consistent with how IPART currently applies the EWL in its assessments. When viewed as an entire process, our proposed changes do not expand the infrastructure that is captured. As is currently the case, an item being listed on the EWL is not sufficient to include in a contributions plan. Councils need to provide further justification through the nexus and efficient design stages of the process.

4.1.2 Including strata space for community facilities

In its Final Report, the NSW Productivity Commission noted that the current EWL has unintended consequences in that councils are prevented from acquiring strata title property instead of land, even where strata acquisition is more cost-effective.⁵

We agree with this view and propose to include strata space as an alternative to land for community services. We do not consider that this inclusion extends the parameters of the existing list, and would support more flexible, innovative and cost-effective solutions.

4.1.3 Including borrowing costs

In our submission to the NSW Productivity Commission's review, we noted that essential infrastructure should be provided early in growing precincts to enable orderly development.⁶ However, we have observed infrastructure delivery that has not kept up with the pace of development.

The problem largely reflects a council's funding preference for areas covered by contributions plans. Councils are generally reluctant to borrow funds to provide essential infrastructure. Through our assessments we have observed that councils generally wait to collect contributions revenue before acquiring land and funding essential infrastructure.

The Productivity Commission noted that forward funding infrastructure brings significant benefits including reducing the cost of infrastructure and land, and increasing certainty for industry, though with additional risk for councils. It considered that rate peg reform would increase councils' ability to borrow, as their debt servicing capacity will increase in line with their increased rates base.⁷ From 1 July 2022 a population adjustment will also be included in the rate peg which will further support councils.⁸

We have included borrowing costs in the proposed EWL to support forward funding of infrastructure. This is consistent with IPART's previous practice in assessing high-value contributions plans.

4.2 Excluding works for community facilities

Our terms of reference state that works for community facilities must not be included in the EWL, and thus should not be paid for by developers.

As the EWL currently only applies to plans that exceed the threshold values, many councils have been including funding for works for community facilities where contribution rates fall below these thresholds. Applying the EWL to all contributions plans would mean that in future no councils would be able to include funding for community facilities in a contributions plan.

While our terms of reference require these costs be excluded from the EWL, stakeholders put forward different views on how works for community facilities should be funded. These views are summarised in **Box 4.2**.

Draft decision



1. Costs included in a section 7.11 contributions plan should relate to provision of local infrastructure in one or more of the following categories:
 - land and/or facilities for open spaces
 - land or strata space for community facilities
 - land and/or facilities for transport
 - land and/or facilities for stormwater management
 - costs of plan preparation and administration
 - borrowing costs to forward fund infrastructure.

Seek Comment



1. Do you think our proposed principles-based approach to the EWL, as part of our broader framework incorporating efficient design and delivery and benchmark costs, provides enough certainty? Have we got the balance right between flexibility and certainty?

Box 4.2 Funding works for community facilities

Community facilities, like community centres and libraries are highly valued by communities and there is an expectation that councils will provide them. Different stakeholders have put forward different views about how works for community facilities should be funded.

We heard from councils that community facilities can be development contingent and including such facilities in a contributions plan would be consistent with the 'impactor-pays' principle. Councils noted that excluding community facilities from contributions plans, where they would otherwise meet the requirements of nexus and efficient design, is arbitrary and may not deliver the right mix of facilities.

The NSW Productivity Commission considers community facilities to be 'general costs' that are driven by population growth rather than development contingent.⁹ As a result, the NSW Productivity Commission considers they should not be funded from infrastructure contributions, but that councils could borrow against future rates revenue to help fund these costs.

Developers support the NSW Productivity Commission's view that community facilities should not be included on the EWL. They consider that the costs of local infrastructure contributions are already too high.

From 1 July 2022, the rate peg will be adjusted for population growth and this will provide additional support to councils to fund community facilities.¹⁰ While this should take some pressure off councils with growing communities, for some the additional revenue from the adjusted rate peg may not be sufficient to fund community facilities. These councils would need to seek a special variation that would increase rates for the existing population or obtain funding via voluntary agreements with developers or government grants.

Councils suggested that where communities see the need for infrastructure being driven by new development, raising their rates to pay for this infrastructure will make communities less willing to accept development in their local area.

Source: IPART

5 Developers should pay for local infrastructure when there is a nexus to the development

Nexus refers to the relationship between the expected types of development and the demand for additional public facilities created by that development. To establish nexus for infrastructure items consistent with the EWL, councils need to provide evidence that the proposed development will create a demand for the public amenities and services in its contributions plans.

Establishing nexus involves demonstrating the additional (marginal) demand created for new or upgraded facilities. Upgrades to existing facilities (to meet the marginal demand created by new development) should not include works to manage existing demand or any repair costs for existing development.

The key component in establishing and demonstrating nexus for new or upgraded infrastructure is that it is underpinned by suitable evidence that nexus exists. This means there needs to be sufficient information and an appropriate level of transparency to show why developers should pay for infrastructure – this will help to avoid or minimise disputes. In particular, councils should establish the need for infrastructure items based on publicly available and exhibited information.

We consider that overarching principles should guide decision making around nexus, as it relates to contributions planning, but that the approach adopted by councils may differ by infrastructure category. Our recommendations around nexus reflect the current approach we take to assessing nexus, which we have codified into a set of requirements for establishing and demonstrating nexus for infrastructure in a contributions plan.

5.1 Overarching principles should guide nexus decisions

Under the *Environmental Planning and Assessment Regulation* councils are required to demonstrate the relationship between expected development and the infrastructure proposed in a contributions plan.^c We consider that three overarching principles should guide decision making in contributions planning as it relates to nexus:

- That the expected development creates a demonstrable increase in the demand for public amenities and services.
- That the types of public facilities proposed in the contributions plan are required to address that demand, having regard to the characteristics, needs and preferences of the new development/population.
- That the proposed facilities consider the extent to which existing facilities have capacity to meet that demand.

^c *Environmental Planning and Assessment Regulation Act 2000* s 27(1)(c) states that a contributions plan must include particulars of the relationship between the expected types of development in the area to which the plan applies and the demand for additional public amenities and services to meet that development.

In line with these principles, establishing nexus in a contributions plan requires a council to match the expected type and location of growth in an area with the public amenities and services needed by future residents and workers, taking into account the current levels of provision.

Nexus is generally established with reference to precinct planning. Changes over time in design standards, technology and costs, as well as community expectations and infrastructure needs, are accommodated through regular review. Planning assumptions, such as expected density and development outcomes, also change. While changes to precinct plans are reasonable, they should be linked to marginal development and additional need for infrastructure (marginal costs).

The 2019 Practice Note provides guidance on the issues and questions councils should consider when deciding what evidence should go into a contributions plan to establish and demonstrate nexus (see **Box 5.1**).

Box 5.1 Current assessment criteria for establishing nexus

In assessing whether there is nexus between the development in the area to which the plan applies (the development area) and the kinds of public amenities and public services identified in the plan, we consider:

- What are the types of public amenities and services for which the proposed development will create demand?
- On what basis have the estimates of demand for the public amenities and public services been established? Is there a needs assessment?
- Has the council assessed the implications of the expected types of development catered for by the contributions plan on the demographic structure of the development area?
- Is there a clear and acceptable method for estimating population change arising from the expected types of development?
- Is the information on demand both reliable and up-to-date?
- Can the new demand be accommodated, in whole or in part, within existing public amenities and public services?
- Are the public amenities and public services appropriately located for the expected types of development in the area to which the plan applies?
- If the expected development did not occur, would the public amenities and public services still be required?

Source: DPIE, *Local Infrastructure Contributions Practice Note*, January 2019.

The 2019 Practice Note also refers to the Department of Planning and Environment's *Development Contributions Practice Notes, July 2005* (2005 Practice Notes), which outline the requirements for local councils in preparing and administering their contributions plans. The 2005 Practice Notes provide further guidance on how councils should identify the types of likely development to occur in the area and estimate the demand for public services and amenities, including through considering:

- overall population change
- trends in demographic change and housing use/occupancy, and participation rates for various activities
- potential for development of employment in the area
- land capacity and availability, including the potential for development or redevelopment
- potential changes to zoning and development controls.

The 2005 Practice Notes also set out the types of information that may assist council, including:

- census data
- user or participation surveys undertaken for various public facilities (such as recreation and community facilities)
- social plans and other demographic analysis/local residential studies
- area of land zoned for development of a particular type
- land ownership patterns (large areas of land held in single ownership may be more easily redeveloped).

5.2 The approach should vary depending on the infrastructure category

While we consider that overarching principles should guide decision making, we recognise that in practice, the approach councils take to establishing nexus for new or upgraded infrastructure may vary by infrastructure category. This recognises that different approaches are appropriate for different infrastructure categories, to reflect how they are planned and designed and the different challenges they present.

5.2.1 Transport infrastructure

Nexus can be established for a range of transport infrastructure that is consistent with the essential works list. New transport infrastructure is generally identified as part of a broader planning process and is often underpinned by studies that consider:

- the indicative layout of the new road network
- how new infrastructure integrates into the existing transport networks
- expected transport volumes and demand.

In general, nexus is established where proposed transport infrastructure is consistent with upfront technical studies.^d

However, it is reasonable for expected infrastructure needs to change over time. In this event, it is incumbent on councils to demonstrate why this is the case and provide evidence supporting the revised infrastructure proposal.

Box 5.2 sets out the evidence we consider should be used to establish nexus for roads and other transport infrastructure in a contributions plan

Box 5.2 Establishing nexus for transport infrastructure

To satisfy the nexus requirement, councils should demonstrate that each infrastructure item in a contributions plan is either:

- Supported by a technical study.
 - The scope and location of the infrastructure should be consistent between the contributions plan and the technical study. It is important that mapping of the proposed infrastructure items (between the technical studies and the contributions plan) is included in the contributions plan.
- Or, where infrastructure is not supported by a technical study (or is not consistent in scope and/or location with the technical study), councils must provide satisfactory evidence or explanation for the item's inclusion (or deviation), its scope and/or location.

Such evidence could include:

- Internal traffic modelling that uses revised or updated population and/or dwelling forecasts to demonstrate that changes are required to accommodate higher or lower demand on transport infrastructure than previously forecast.
- Options analysis (i.e. cost-benefit analysis of the alternatives considered) and factors considered.

Councils should also demonstrate that the classification of each road is consistent with the hierarchy in any applicable Development Control Plan(s). If there are inconsistencies, councils should provide an explanation.

^d We note that a Development Control Plan (DCP) will generally be underpinned by a technical study. Nexus is established for infrastructure in a contributions plan that aligns with a DCP.

5.2.2 Stormwater infrastructure

The proposed EWL allows land and facilities for stormwater management. Nexus is established for upgrades to existing works or new works required to meet the increased demand for stormwater services due to the development:

- by showing the link to the increased impervious surface area created by new development
- up to relevant state and national standards by clearly identifying the stormwater outcomes or requirements (both water quantity/flow and water quality) that will be met with the proposed land and works. That is, the factors driving expenditure and the legislative requirements that are being met.

Nexus is also established for works required to restore the area to its pre-development state (consistent with impactor-pays) up to the standard that meets environmental protection outcomes in legislation.

However, it is unlikely nexus would be established for any works required to manage existing demand or repair damage to creeks and other stormwater infrastructure from pre-development land uses (inconsistent with impactor pays).^e

Further, it is unlikely nexus would be established for temporary works to facilitate development. Stormwater infrastructure should be delivered early to enable development to occur, which should minimise or eliminate the need for temporary works such as stormwater basins.

Like transport infrastructure, the need for new stormwater infrastructure is also generally established by the technical studies underpinning precinct planning. However, it should be demonstrated that the relevant state and national standards are met but not exceeded.

Box 5.3 sets out the evidence we consider should be used to establish nexus for stormwater infrastructure in a contributions plan.

^e The acquisition of land and/or works for environmental purposes is not consistent with the EWL and should not be included in a contributions plan. The exception is if the infrastructure dual purpose, however it should only be included up to the extent of that dual purpose.

Box 5.3 Establishing nexus for stormwater infrastructure

To satisfy the nexus requirement, councils should demonstrate that each infrastructure item in a contributions plan is either:

- Supported by a technical study.
 - The scope and location of the infrastructure should be consistent between the contributions plan and the technical study. It is important that mapping of the proposed infrastructure items (between the technical studies and the contributions plan) is included in the contributions plan.
- Or, where infrastructure is not supported by a technical study (or is not consistent in scope and/or location with the technical study), councils must provide satisfactory evidence or explanation for the item's inclusion (or deviation), its scope and/or location.

This evidence should demonstrate that changes are required to accommodate higher or lower demand on stormwater infrastructure than previously forecast.

Councils should also demonstrate that the proposed stormwater infrastructure is consistent with the recommended stormwater strategy in any applicable Development Control Plan(s). If there are inconsistencies, councils should provide an explanation

5.2.3 Open space infrastructure

The proposed EWL allows land and facilities for open space. Establishing nexus for open space relates to the:

- overall rate of provision of land for open space and recreation purposes
- number and types of facilities (embellishment) for active and passive recreation.

In general, in establishing nexus councils should demonstrate that the open space land and embellishment included in a contributions plan meet the needs of the anticipated population of the development.

Providing sufficient open space for new and expanding communities is an important part of precinct planning. As recognised by the NSW Productivity Commission, the provision of open space (and, we note, IPART's assessment of it) is currently based on a standard of 2.83 hectares for every 1,000 people in greenfield areas. The NSW Productivity Commission recommended a move to performance-based benchmarks for open space planning.^f

^f The NSW Productivity Commission considered that a "performance-based approach would focus on outcomes, rather than a land input, with scope for more innovative and efficient mechanisms to fulfill open space objectives. For example, in greenfield areas, passive recreation areas could be on land that is also part of the stormwater management system."

The NSW Government is proposing a new Design and Place State Environmental Planning Policy (SEPP), as part of a review of the State's environmental planning policies. The Design and Place SEPP will bring together a range of considerations that impact the design and planning of places in NSW. It will deliver objectives of the *Environmental Planning and Assessment Act 1979* and the Premier's Priorities for a better environment.⁹ The SEPP will highlight key considerations including connecting with Country, sustainability, resilience, and overall design quality. It will prioritise urban design, public space, and green infrastructure.

We anticipate that the Design and Place SEPP will contain updated benchmarks for the provision of open space in new developments, including the consideration of active versus passive open space requirements. Our preliminary position is that, once in place, nexus would be established for open space in a contributions plan up to these benchmarks.

We generally consider the level of open space provision to be a precinct planning decision. Establishing the precinct will usually involve the commissioning of technical studies to assess future community needs. We expect that such studies, along with a council's own relevant policies (e.g. recreation strategy) would usually be sufficient to establish nexus for open space embellishment.

Box 5.4 below sets out the evidence we consider is appropriate to establish nexus for open space infrastructure in a contributions plan.

Box 5.4 Establishing nexus for open space

To satisfy the nexus requirement, councils should demonstrate that the proposed open space is consistent with relevant:

- statutory policies for infrastructure provision (e.g. the Design and Place SEPP) and any associated benchmarks for the level of open space provision.

Council should also establish nexus for open space and embellishment with reference to:

- recommendations in any technical studies prepared to inform planning for the relevant area (i.e. technical studies outlining the expected demographics of the incoming population and the additional facilities required to meet their needs, given the development context)
- the council's own policies, strategies and standards (some councils have adopted policies or prepared strategies for the provision of open space and recreational facilities across their local government area)
- relevant benchmarks reflecting NSW Government policies and guidelines (which may include population-based benchmarks).

⁹ The NSW Government is committed to increase the proportion of homes in urban areas within 10 minutes' walk of quality green, open and public space by 10% by 2023.

Box 5.4 Establishing nexus for open space

Council should also demonstrate that the quantity/scope and location of works only includes embellishment of areas that will usually be accessible to the public for recreational purposes.

The terms of reference for this review define development-contingent costs with reference to within-development open space. In previous assessments of contributions plans, IPART has found that nexus has been established for open space outside of the precinct¹¹ and for co-located or shared facilities (see **Box 5.5**) in some circumstances. We continue to support a broader definition of development-contingent open space but note that our approach may be impacted by changes in NSW Government policy, such as introduction of the Design and Place SEPP.

Box 5.5 Example: Nexus for a co-located facility for open space

In the contributions plan for North Kellyville, The Hills Shire Council included an additional synthetic playing field co-located with a new school, with a small amenities block and 50-space car park. No additional land was required for this facility.

In our review of this plan, we found that nexus was established for this embellishment. The additional playing field resulted in a rate of playing field provision in North Kellyville that is closer to the LGA-wide rate given the higher anticipated population,

Partnership with the Department of Education meant that the playing field would be located on land dedicated by the Department, and both the playing field and adjacent passive open space park would be available for community use outside school hours.

Although the reconfiguration of recreational facilities on this site has resulted in the reduction of land and embellishment for passive open space, we accept that there will be no reduction in recreational capacity for local residents, and the council has achieved a cost-efficient solution for providing additional recreational facilities.

Source: IPART, *Assessment of Contributions Plan 13 – North Kellyville*, July 2020, p 55.

Draft decision



2. Costs included in a section 7.11 contributions plan should relate to provision of development contingent local infrastructure. Proposed items will be development contingent where:
 - The expected development creates a demonstrable increase in the demand for public amenities and services.
 - The types of public facilities proposed in the contributions plan are required to address that demand.
 - The proposed facilities consider the extent to which existing facilities have capacity to meet that demand.

Seek Comment



2. Is the proposed evidence to establish nexus for infrastructure in a contributions plan appropriate and reasonable? Is there any other guidance on nexus for local infrastructure that should be included in an updated practice note to assist councils, developers and other stakeholders in preparing and assessing contributions plans?

6 Incorporating efficient design and delivery principles

This chapter sets out our draft decision on incorporating efficient design and delivery into precinct and infrastructure planning. Ensuring infrastructure is efficient is a central part of any precinct planning process. Infrastructure that is efficient not only reflects minimum applicable standards, but also meets community needs and provides value for money.

The sections below set out practical advice about the principles of efficient design and delivery and how they should be incorporated. This advice draws on several issues we have identified over the years when assessing contributions plans. We also set out our views on the evidence and documentation that councils need to include in a contributions plan to demonstrate that local infrastructure is efficiently designed and delivered.

We have also incorporated these principles into our review of benchmark costs for local infrastructure (see chapters 7-9).

6.1 Overarching principles to guide efficient design and delivery

To include the cost of land and/or facilities in a contributions plan, a council must show that it has considered a range of options and identified the most cost-effective means of providing assets to meet the development-contingent demand.

We consider that two overarching principles should guide decision making in contributions planning as it relates efficient delivery and design:

1. That the infrastructure delivers a base level of performance having regard to any relevant government regulations or industry standards and community needs
2. That the council provides value for money by selecting the most cost-effective option for delivering the base level of performance – not necessarily the option with the lowest up-front cost.

We have designed these principles to ensure a flexible, future proof approach for incorporating efficient infrastructure in contributions plans. They would ensure that contributions plans:

- take account of changes in design standards, accessibility and community needs for infrastructure over time including resilience to climate change
- enable councils to consider combinations of open space land and embellishment that deliver the required amenity in the most cost-effective way
- allow councils to make trade-offs between up-front capital costs and ongoing maintenance costs to invest in infrastructure that provides the lowest cost to society overall
- encourage councils to consider climate change in their planning both in terms of mitigation and adaptation (for example, they may choose to include the cost of planting mature trees over saplings to mitigate the impact of the heat island effect created or exacerbated by the development, as this approach is consistent with the impactor pays principle)
- continue to be applicable if the list of infrastructure items on the EWL was to change.

6.2 Base level performance considering design standards and community needs including resilience to climate change

The first key principle of efficient design and planning is that infrastructure should provide a base level of performance that is defined by the objectives the item is meant to meet. For example, the objective for a road should account for the speed and volume of additional cars generated by the development (for example, wider lanes and shoulders are usually used for roads with higher speeds and higher traffic volumes). For the purpose of determining what share of the costs developers should pay, infrastructure should meet but not exceed the purpose for which it is intended.

In our consultation to date, we have heard differing views from stakeholders on whether there should be a requirement for infrastructure in a contributions plan to be 'base level'.

Developers want to minimise the cost of contributions plans and restricting infrastructure to base level helps deliver this. Councils on the other hand argue that in practice they need to deliver the level of service their community expects. They consider that restricting funding to base level does not adequately compensate them for the infrastructure costs imposed by the development.

One argument for focusing developer contributions on base level infrastructure is that infrastructure is governed by what residents are willing to pay. Under the framework proposed in this Draft Report, councils would need to find additional funding to top-up the cost of providing infrastructure to a higher standard. This ensures that councils are accountable to residents for these costs. If councils can avoid this accountability, this would allow them to levy developers without necessarily considering whether the infrastructure provides good value for money.

On the other hand, developers are likely to benefit from high standards of local infrastructure as this increases the value of their developments for potential purchasers. Requiring developers to pay for lower standards than the surrounding area may result in a transfer of value from existing ratepayers to developers. This transfer of value can also occur if a higher standard is provided in the development and it is funded from other sources.

The NSW Productivity Commission considered that infrastructure that exceeds base level reflects community preferences and council choice and as such, should be funded through general rates revenue and not through developer contributions.¹² Our terms of reference support this view, stating that benchmarked costs should reflect the base level of infrastructure that is appropriately funded by development. Consistent with this requirement, we have included the principle that the scope of any infrastructure item included in a contributions plan should be the minimum functionality needed to meet the desired performance outcome to avoid a scope that may be considered over engineered.

To demonstrate that land and works are consistent with this principle, councils need to clearly outline any relevant standards that have informed the scope and size of infrastructure items. Councils also need to provide evidence of the development-contingent community need that is being met by the item proposed. The following sections set out further information on these areas.

6.2.1 Design standards and other technical specifications

There are several guidelines, legislative requirements, technical standards, and specifications that inform the performance outcome, design or scope of infrastructure items. Community standards and duties of care are reflected in common law, Federal and State legislation and regulations, accepted industry standards and practice, the Growth Centres Development Code and individual council Development Control Plans.^h

For example, councils are required to comply with the accessibility standards under the *Disability Discrimination Act 1992 (Cth)*. The accessibility standards apply to various infrastructure items, including pedestrian pathways, ramps, and bus shelters. In some cases the obligations on councils will be clear and in some cases, there may be multiple guidelines that could be applied.

These standards can change over time and so it is important that our approach is flexible enough to take account of any such changes. In addition, it is important that councils and developers have enough guidance to ensure that contributions plans are consistent with efficient design principles.

As noted in chapter 2, we expect that DPIE will update its practice note to ensure that councils clearly understand the information that they are required to include in contributions plans. We are keen to hear from councils, developers and other stakeholders on how definitively an updated practice note should specify the standards expected of infrastructure.

6.2.2 Determining the base level to meet community needs

In addition to any relevant standards or applicable legislation, the design and scope of infrastructure items should not exceed the base level required to meet the development-contingent need that has been identified. For example, for open space, base level embellishment includes those works that are required to bring the open space up to a level where the site is secure and suitable for passive or active recreation.

The 2019 Practice Note includes a list of items that can be included as base level embellishments such as site regrading, utility servicing, basic park structures and sports fields. It also lists particular items that are not considered base level, such as skate parks, BMX tracks and multi-storey car parks.

Our proposed approach does not specifically include or exclude any items from a contributions plan based on a presumption regarding whether it constitutes base level infrastructure. Rather councils need to demonstrate that the infrastructure proposed is the minimum needed to meet the performance outcome based on its assessment of community needs.

Councils would be expected to identify and articulate the need being met by the infrastructure as part of their plan and where necessary provide an assessment of different options and the costs and benefits associated with them (see section 6.3 for further information).

^h Councils also may impose infrastructure specifications on developments through conditions of consent.

As noted in chapter 2, we expect that DPIE will update its practice note to ensure that councils clearly understand the information that they are required to include in contributions plans to demonstrate that infrastructure is consistent with this principle. We are keen to hear from councils, developers and other stakeholders on what further guidance would be useful for DPIE to include in an updated practice note.

The outcomes that need to be delivered may change over time. They should be considered at a functional level in order to ensure that different options for meeting the need are considered (see **Box 6.1**).

Box 6.1 Defining the need or outcome delivered by infrastructure

The need that is being met by the land and works in a contributions plan should be defined by reference to the outcome it is delivering. It is important that the council can adequately identify the outcome that the infrastructure needs to deliver and can differentiate this from the means by which the need may be met.

For example:

- A council should identify a need for a water crossing rather than a need for a bridge. Consideration of the specific circumstances in which the need arises (such as the size of the water course and suitable locations for the crossing) allows the council to consider different options and alternatives, such as culverts, before deciding whether a bridge is the base level infrastructure required to meet the need.
- A council should identify a need for active open space for seniors rather than a need for exercise stations suitable for seniors.
- A council should identify a need for an intersection that would suitably accommodate a given increase in traffic, rather than a need for a new roundabout.

We do not consider that it is appropriate to prescribe what constitutes base level infrastructure because it is likely to differ depending on individual circumstances as well as change over time. This is also consistent with the NSW Productivity Commission's recommendations for a principles-based approach to enhance the efficiency of the infrastructure contributions system.

For example, prior to the COVID-19 pandemic, the need for touch-free sensors for pedestrians wanting to cross a road at traffic lights may not have been considered base level, but new awareness of the fundamental importance of infection control methods may see features like this become standard in some areas. We consider that councils need to be able to respond to needs such as these that evolve over time in their contributions plans.

While developers are only required to fund base level infrastructure, we are of the view that councils should be able to choose to exceed this standard in the infrastructure they invest in. Councils would need to fund the 'gap' from another source. As discussed in chapter 4, we also acknowledge that there are different views on how community facilities should be funded and whether this is from developers or other funding sources.

6.2.3 The need for infrastructure that is resilient to climate change

Climate change is expected to increase temperatures and alter the frequency and intensity of extreme weather events such as heatwaves, flooding and bushfires.²³ As the frequency of extreme weather events increases, and population continues to grow, there will be an increasing need to improve the resilience of infrastructure, particularly for councils that support essential community services.

We consider that base level performance includes providing land and works that are resilient to climate change, such as bridges, or flood access roads that are future proof. As noted above, this does not involve prescribing what standard of infrastructure is needed but providing flexibility for contributions plans to respond as required over time. For example, climate change has impacted on flood predictions and what is considered base level today may not necessarily provide the minimum functionality if the impacts of climate change are exacerbated.

Councils need to consider climate change in their planning both in terms of mitigation and adaptation. For example, they may choose to include the cost of planting mature trees over saplings to mitigate the impact of the heat island effect created or exacerbated by the development, as this approach is consistent with the impactor pays principle.

In preparing their contributions plans, councils should demonstrate how they have included the impacts of climate change. We consider that councils should use the NSW Treasury *Guidelines for Resilience in Infrastructure Planning: Natural Hazards, August 2019* as a starting point. In summary, this involves:

- Outlining any infrastructure that is intended to reduce natural hazards associated with climate change including an assessment of the hazards and the climate scenarios that are being considered.
- Identifying the key risks and uncertainties and how these have been incorporated into options.
- Assessing the costs and benefits of making infrastructure more resilient including quantifying risks and uncertainties.

6.3 Providing value for money based on the most cost-effective option to meet base level performance

The second key principle of efficient design is that infrastructure should provide value for money. This involves councils considering a range of options for meeting the base level performance outcome and selecting the most cost-effective option. We expect councils to consider a range of factors that impact value for money. These include:

- different options for meeting the base level of performance considering how costs vary over the lifecycle of providing the infrastructure
- efficient staging and timing of works (including avoiding duplicate temporary works)
- opportunities for innovative solutions including dual and shared use of open space and public facilities
- whole of catchment stormwater planning

- regular review of plans using the most up to date information.

The following sections set out further information on each of these factors.

6.3.1 Identifying what delivers the best value for money

Infrastructure that provides value for money represents the most cost-effective way of delivering services to meet the base level performance outcome. This does not necessarily mean the option with the lowest up-front cost. Contributions plans should outline the options that have been considered for meeting base level performance and show that the option selected is the most cost-effective (including where developments in technology can help achieve cost savings).

We consider that councils should:

- assess a reasonable number of options for meeting performance outcomes
- adopt the operating and capital cost mix that minimises costs over the infrastructure's lifecycle,
- consider whether upgrades and improvement to existing infrastructure are the most cost-effective option
- consider options for innovation such as dual and shared use of open space and community facilities.

To demonstrate value for money, we expect councils to include information on the planning and decision making framework that has been used to decide between the options, how the selected option will meet performance outcomes (including any technical reports to support this position), and any trade-offs between different levels of costs and the level of performance that would be provided by them. The following sections set out further information on these areas.

Assessing a reasonable number of options for meeting performance outcomes

In some instances, for example where an expert technical report indicates that one option clearly meets a performance outcome (such as the need for an arterial road to meet expected traffic volumes), we would not expect councils to present analysis of a wide range of options. However, in other cases there may be different types of investment that deliver an outcome, with different costs and benefits. We also expect councils to clearly articulate any cost and quality trade-offs. This approach will enable stakeholders to make better, more informed decisions about the trade-offs between costs and community benefits. These trade-offs, which should be considered as part of contributions planning, should address issues of both the location and design of infrastructure.

Adopting the operating and capital cost mix that minimises costs over the infrastructure's lifecycle

All else being equal, an item with a lower upfront capital cost may have higher ongoing costs (such as maintenance) over the life of the asset and vice versa. Councils should not include a higher up-front cost to developers purely to minimise their own future maintenance costs nor should they be compelled to include the cheapest up-front cost if doing so would lead to higher costs overall. The individual circumstances are likely to affect which option is the most efficient. For example, synthetic turf may have a higher upfront cost compared to regular turf. However, it can facilitate higher usage with lower ongoing maintenance costs, and so where the expected use of that surface is sufficiently intensive, a synthetic surface may be more cost-effective.

Considering whether upgrading or improving existing infrastructure is cost-effective

It may be more cost-effective to upgrade or improve existing infrastructure in infill areas rather than invest in new infrastructure. Council's plans should consider these options where relevant.

Considering options for innovation such as dual and shared use of open space and community facilities

It is important that efficient design principles provide for innovation that can lead to more cost-effective outcomes. This could include opportunities for dual and shared use of open spaces, and community facilities. We consider that our approach would support these opportunities. For example, there could be opportunities to use riparian land as open space for the community.

The boxes below set out examples of how this approach would apply to councils' previous development plans.

Box 6.2 Assessing options for open space outside the precinct

In the contributions plan for Castle Hill North, The Hills Shire Council identified that it would be prohibitively expensive to provide additional district sports facilities within the precinct. The council identified an alternative option of providing open space that is approximately 4.5km away from the precinct.

The council demonstrated that it undertook an options analysis to consider the benefits and costs of a range of alternatives (including purchasing land in the precinct and expanding other nearby facilities). Ultimately, the council took a broader perspective to address the additional demand for open space created by the new development, which we considered was reasonable in this instance.

Source: IPART, *Assessment of Contributions Plan 17 – Castle Hill North*, November 2019, pp 51-54.

Box 6.3 Cycleway creek crossings in Vineyard Contributions Plan

In Hawkesbury City Council's Vineyard Contributions Plan, the council proposed to include 4 cycleway creek crossings in the plan at a total cost of \$486,000.

During our assessment we asked for more information about the design and source of the cost estimate. The council suggested the cost should be closer to \$250,000 per bridge and that the bridges would need to be approximately 20-30 meters long to adequately transverse the Killarnay Chain of Ponds, which is flood prone.

The council provided further information later in the assessment which suggested the actual cost of the crossings would be \$2.91 million (an increase of almost 500% from the costs in the plan), based on expert advice and further considering flood risks.

Given the magnitude of the council's proposed increase in costs for cycleway creek crossings, we considered whether it had adequately considered the benefits of the proposed crossings, given the costs and available alternatives.

We found 2 of the bridges could be removed with minor changes to the layout of the cycleway path or could be incorporated as culvert bridges adjoining existing or proposed roads in the precinct.

We recommended the costs of 2 bridges be removed and the cost of the remaining bridges be reduced and suggested the council should consult its community about the costs and benefits of including the additional bridges before they appear in the plan.

Source: IPART, Assessment of Hawkesbury City Council's Vineyard Contributions Plan, November 2019, pp 46-47.

6.3.2 Efficient staging and timing of works

Councils should consider the benefits of providing more infrastructure early to ensure efficient and orderly precinct development. We have observed infrastructure delivery that has not kept up with the pace of development. In some instances, this has resulted in development delays, reliance on councils entering into Voluntary Planning Agreements (VPAs) with early developers, and a need for temporary works, such as temporary stormwater basins to facilitate development.

Developers in some areas are required to deliver temporary works to progress their developments. This may include temporary access roads, detention basins and other stormwater management works. Usually, the developer will not be provided with an offset against their contributions amount for providing temporary works.

The developer must weigh up the costs of providing the temporary facilities, such as construction costs and a reduced dwelling yield as they manage water run-off and retention within their development sites, against their holding costs as they wait for the council to deliver the works in the plan.

Through our assessments, we have observed that councils generally wait to collect contributions revenue before acquiring land and funding essential infrastructure. We consider that waiting for sufficient contributions revenue before delivering essential infrastructure is inefficient and does not support growing communities. This issue could be addressed by councils borrowing to forward-fund infrastructure.

Forward funding and early delivery of essential infrastructure would reduce the need for temporary facilities. Constructing temporary facilities may be inefficient and avoidable with the early provision of development-enabling infrastructure. Our proposed change to the EWL highlights the ability for councils to include the borrowing costs of funding infrastructure attempts to address this problem and ensure that contributions plans reflect an efficient staging and timing of works. We expect councils to include an assessment of these options when demonstrating that their options represent the best value for money.

6.3.3 Efficient design involves whole of catchment stormwater planning

A catchment-wide approach to stormwater infrastructure planning and delivery can reduce costs, relative to a precinct-level approach. With a catchment-wide approach, there is the potential to achieve economies of scale in stormwater infrastructure (e.g. fewer, larger detention basins rather than a larger number of smaller basins) and to take a more strategic approach to the location of infrastructure (potentially reducing the extent of developable land required for stormwater works and the extent of works themselves). This can result in significant cost savings.

Natural resource management legislation also acknowledges the benefits of catchment scale management to minimise adverse cross-boundary impacts and negative externalities. Planning for stormwater management at a catchment or regional level increases the range of infrastructure configuration options available. It can therefore help ensure that required waterways, environmental and integrated water cycle management outcomes are achieved at least cost.

In recognition of these benefits, our submission to the NSW Productivity Commission's Review of Infrastructure Contributions in NSW recommended that catchment-based stormwater infrastructure could be delivered by a new special purpose authority or a water utility, to clearly assign responsibility for stormwater infrastructure and services to one entity within a catchment.

To ensure efficient outcomes, stormwater infrastructure should be planned, prioritised and delivered at a catchment level wherever possible. We therefore consider that councils should explore whole of catchment stormwater planning and infrastructure delivery as part of demonstrating efficient design and planning. Councils should include information in their plans on how they have done this and how it has impacted on the infrastructure in the plan. This would also need to be supported by an appropriate approach to establishing nexus and the apportionment of costs for the infrastructure.

This should be more straightforward where there is one council (or one stormwater service infrastructure provider) within a catchment. However, where there is more than one council responsible for stormwater infrastructure provision within a catchment, a catchment-wide approach will require the councils to work together in planning and delivering required infrastructure. In some cases, this may also require the councils to work with a water utility – where that utility is separate to the councils and is also responsible for delivering stormwater infrastructure within the catchment (as is the case with Sydney Water in parts of Sydney).

We note that this will likely incur some transaction costs and require ongoing effort by councils to co-ordinate with other relevant entities within the catchment. However, councils often work with other entities and infrastructure providers across a range of areas.

In its Final Report, the NSW Productivity Commission noted that while joint stormwater infrastructure and contributions planning between councils is currently possible, it is not common practice as councils often have their own stormwater management plans, standards of provision and timelines for delivery. It considered that DPIE and councils should work together to develop more efficient ways of providing stormwater management infrastructure. We consider that what is expected of councils' contributions plans should be updated over time as this work progresses.

6.3.4 Regular review of plans using most up to date information

Councils should regularly review contributions plans using the most up to date information and consider if their plans have enough infrastructure, and if there is a scope to remove works from a plan. Over time, further information may become available on factors such as development yields (and thus population) which impacts on infrastructure requirements.

Box 6.4 below sets out an example where The Hills Shire Council efficiently reviewed its plan and updated the infrastructure needed based on more up-to-date information.

Box 6.4 Box Hill Contributions Plan No 15 (CP15) example

When updating CP15, The Hills Shire Council identified that it needed to change the treatment of some of its intersections because of additional demand that was being driven by higher-than-expected dwelling yields. We considered that the council demonstrated efficient design and planning for these changes through its updated internal transport modelling.

Source: IPART, Assessment of Contributions Plan 15 –Box Hill, October 2020, pp 21–23.

Draft decision



3. Costs included in a section 7.11 contributions plan should reflect the base level, efficient local infrastructure required to meet the identified demand. Proposed items will satisfy these requirements if:

- They deliver the minimum level of performance required to meet the identified need and comply with government regulations or guidelines and industry standards.
- They provide value for money compared with the different options available for meeting the identified need, with costs and benefits considered over the life of the assets proposed.

Seek Comment



3. What further guidance on base level, efficient local infrastructure should be included in an updated practice note to assist councils, developers and other stakeholders in preparing and assessing contributions plans? How definitively should the guidance in an updated practice note specify the standards expected of infrastructure (e.g. legislation and other industry standards)?

7 Benchmark costs for base level infrastructure

The Essential Works List describes the categories of land and works which may be included in a 7.11 local contributions plan. These categories include hundreds of potential items and configurations which may be required to support a new development.

Once a council has analysed the infrastructure needs of a development, identified the items which fall within the EWL categories and has established Nexus (i.e. caused by the development) the council may levy the efficient costs of base level infrastructure through a 7.11 contributions plan as a condition on a development approval.

While some essential works will be unique to a development or location, many essential items are similar. Under the proposed reforms, determining the costs to be levied through a local contributions plan may be done in two ways:

1. By using the standardised benchmarked costs
2. By using a site-specific costing approach (including actual costs, where the infrastructure has already been constructed).

In this chapter we introduce the items we have chosen for benchmarking and our approach to determining standardised benchmarks. We are seeking feedback on the items selected and our approach. We expect to annually update the benchmarks with an appropriate inflator, and regularly complete a review of the benchmark items, and scope to ensure the benchmarks remain up to date.

To simplify the contributions planning system, the benchmarks need to be applicable to most projects. For this reason we have recommended a system of benchmarks that can capture some variation, between projects, minimising the use of site-specific cost estimates.

Where an item has been benchmarked, councils should use the cost on the benchmark list for the relevant item. Where the item has not been benchmarked or the circumstances of the development have not been accounted for in the scope of the standardised benchmarked item the council should use the site-specific costing approach.

7.1 Essential works items

The essential works list determines the categories of infrastructure which can be levied through a local infrastructure contributions plan. Our recommended essential works list is principles based. This means that we have not listed specific infrastructure items on the list, as different items will be relevant in different circumstances. Our approach is outlined in detail in chapters Overview of our proposed framework 3 to 6. The proposed categories of items on the essential works list are:

- Land and/or facilities for open spaces
- Land or strata space for community facilities
- Land and/or facilities for transport
- Land and/or facilities for stormwater management
- The costs of plan preparation and administration

- Borrowing costs to forward fund infrastructure.

7.2 Developing infrastructure benchmarks

The aim of setting benchmark costs is to simplify the process of contributions plan preparation, enabling plans to be prepared earlier and exhibited with rezoning proposals.

The use of benchmarks will lower administrative costs for councils. Other objectives of the infrastructure benchmarks are to improve efficiency, provide a consistent level of infrastructure to be included in plans (defined as 'base level') and to provide cost signals to developers about high and low cost areas for development.

We have sought assistance from an engineering and construction consultant, Cardno (NSW/ACT) Pty Ltd (Cardno) to both develop the benchmarks and the costing approach that should be used where the benchmarks are not applicable. The sections below outline the approach we asked Cardno to take in developing the benchmarks.

Cardno's benchmark methodology paper is available on the review page of our website. Cardno is in the process of putting together their advice on the complete set of standardised benchmark scopes. We expect to release this advice on 12 November 2021 and provide stakeholders with a reasonable time in which to comment before we finalise our review. Cardno will incorporate early feedback provided by stakeholders in response to our draft report in their advice.

Non infrastructure benchmarks are dealt with separately. See sections 7.9 for land costs,ⁱ 7.10 for plan administration and 7.11 for borrowing costs.

7.3 Benchmark items

Based on the categories of essential works, we prepared a list of infrastructure and non-infrastructure items for benchmarking.

We aim to have a sufficiently detailed list that will enable councils to find relevant infrastructure but not be so detailed that it is difficult to use. We want to ensure that our benchmarks focus on base level infrastructure and take into account the range of factors that may lead to differences in costs. These differences may come from differences in location (eg. rural, regional or metropolitan), from different types of development (eg. greenfield or infill) or from differences in site conditions.

In 2014, we were asked to complete a similar benchmarking exercise. Our review identified '*benchmarkable items*', '*reference items*' and '*non-benchmarkable*' items. Starting with the list developed in our 2014 report of benchmarkable items we refined the list by comparing it to items allowed in previous contributions plans we have assessed. We identified items that commonly appear on contributions plans that we have reviewed.

ⁱ Land costs are outside the scope of our terms of reference

We provided the revised list to Cardno, to seek advice on the typical scope of infrastructure items to a base level of infrastructure and determine efficient costs. IPART's revised list, has also incorporated input from Cardno. **Table 7.1** identifies the items for benchmarking.

Table 7.1 Infrastructure items for benchmarking

1. Transport

1.01	New local road
1.03	New collector road
1.04	New sub-arterial road
1.05	New industrial road
1.06	New rural road
1.07	Upgrade to collector road
1.08	Upgrade to sub-arterial road
1.09	Signalised intersection – single lane
1.10	Signalised intersection – two lane
1.11	Signalised intersection and 1 turning lane
1.12	Signalised intersection and 2 turning lanes
1.13	Priority controlled/ un-signalised intersection
1.14	Roundabout – single lane
1.15	Roundabout – two lane
1.16	Shared pathway 15m
1.17	Footpath/path
1.19	Road bridge (including over railways, waterways, gradeseparation)
1.20	Cycleway/Pedestrian bridge
1.23	Bus shelter
1.25	Pedestrian crossing
1.26	Signals/traffic signals
1.27	Street lighting
1.28	Road safety

2 Stormwater

2.01	Culvert
2.02	Combined basin and raingarden facility
2.03	Single raingarden facility
2.04	Bio-retention basin
2.05	Bio-retention filter
2.06	Bio retention area
2.07	Bio-retention system
2.08	Wetland basin
2.09	Constructed wetland
2.10	Detention basin
2.11	Gross pollutant trap
2.12	Enhanced storage area
2.13	Stormwater pipe
2.14	Stormwater headwall
2.15	Stormwater pit
2.16	Stormwater channel/open channel
2.17	Stormwater channel stabilisation

3 Open space embellishment

3.1	Amenities building 400sqm
3.2	BBQ area
3.3	Boundary Fencing
3.4	Car park
3.5	Cricket wicket
3.6	Cycleway/Lm
3.7	Demolition
3.8	Double playing fields
3.9	Double playing lighting 100 Lux
3.10	Electrical works
3.11	Hydraulic works
3.12	Basic landscaping / smq
3.13	Multipurpose courts and lighting / court
3.14	Multipurpose courts / 6no.
3.15	Park lighting
3.16	Pathway /Lm
3.17	Paved area/m2
3.18	Picnic area
3.19	Playground
3.20	Seating area
3.21	Shade sail
3.22	Spectator seat/ea
3.24	Turfing / smq

7.4 Benchmark scopes

In order to ensure that councils and developers understand what infrastructure the benchmarks are based on we also need to be clear about the scope of the items included on the list.

Item datasheets will describe the typical scope for each item describing the components and activities that make up the benchmark cost and identify key exclusions and relevant standards. The typical scope also includes subitems or variations, key risks allowed for under contingency allowances, as well as a standard drawing where required.

We will develop Indicative scopes for each infrastructure item in consultation with Cardno. **Table 7.2** displays the Item data sheet template that will be used to describe the typical scopes.

Table 7.2 Item data sheet template

Item Definition	
Item Name	Name of the infrastructure item included under one of the categories on the Essential Infrastructure List.
Item No.	The unique number assigned to each infrastructure item.
Functional Description	A description of the most fundamental requirements for the infrastructure item.
Inclusions	Describes the significant components of the final delivered asset, included in the base cost.
Key scope of work inclusions	The key activities assumed to be undertaken to construct or install the infrastructure item.
Exclusions (may be reasonably required)	Required but covered elsewhere – cross referenced to an appropriate item or sub-item
Exclusions – exceed minimum requirements	Assets which may sometimes be included but often considered over-engineered or gold plated.
Key identified risks	Examples of the most significant risks contemplated in delivering the infrastructure item.
Sub-item details	The scope of the infrastructure item specific to a particular sub item
Applicable standards	Refers to industry accepted design standards or guidance relevant to an infrastructure item / sub item.

Source Cardno (ACT/NSW) Pty Ltd, Draft Benchmarking Items and costing Methodology, October 2021, table 5-1, p5.

The terms of reference require us to benchmark base level infrastructure. We will consider the following principles when determining the appropriate scope for each infrastructure item:

- Industry standards – where possible infrastructure should be designed to meet any applicable industry standards
- Lifecycle costs – where possible infrastructure should be based on the mix of capital (up-front) and maintenance (ongoing) costs that deliver the lowest cost over the lifecycle of the asset
- Climate change – infrastructure should be specified to withstand or mitigate the likely impacts of climate change over the life of the asset
- Accessibility and safety standards – where possible infrastructure should be designed to ensure that all members of the community who need to access the infrastructure are able to do so
- Measures to address the impact of development on the community – for example, measures to address the urban heat island effect, where relevant.

We have asked Cardno to provide design drawings for each item that will have a benchmark cost

7.5 Costing

Benchmark costs will be developed based on the typical scopes using two methods. The first uses cost data from previous projects and contracts to estimate an appropriate benchmark based on actual costs. Where previous projects cannot be found or the data is not reliable, Cardno will estimate benchmark costs based on a first principles build up costs, estimating the individual components and activities.

Cost information will be presented with details such as a minimum quantity, or where relevant, cost bands which indicate rates that change relative to the scale of the project. The draft report provided by Cardno sets out proposed costing approaches and is available on the review page of our website.

7.6 Adjustment for complexity

We acknowledge that each development will have a unique set of constraints that can impact the complexity and cost of delivering the same piece of infrastructure to the same standard. To address this concern and increase the usefulness of the benchmarks we have asked Cardno to provide advice on an approach that can account for variations between different sites and circumstances, including greenfield and infill developments, or in regional or metro locations. We asked Cardno to develop base costs and relevant adjustment factors, which could be applied to a benchmark to deliver a range of benchmark costs to appropriately account for site-specific differences.

We consider that this approach should ensure that the benchmarks are applicable to a broader range of projects which will minimise the need for councils to develop lengthy site-specific cost estimates. Setting a single benchmark cost for each item, which does not take these factors into account will:

- not signal high and low cost areas
- risk over or under recovery
- limit the use of benchmarks
- drive greater use of the lengthy site-specific cost estimates
- likely create disputes between councils and developers.

Our approach seeks to set benchmarks in a way that balances efficiency and cost-reflectivity. We expect the adjustment factors to recognise the additional costs of construction in some areas including:

- **Congestion** - for example, in built up areas that affect site access, existing utilities, traffic management or night work
- **Location** - distance from a metropolitan centre or material source increases travel time for staff and materials
- **Ground conditions** - for example, topography and geotechnical ground conditions that impact site preparation

These are factors that we expect councils to be able to estimate at an early stage of planning, based on knowledge of their local areas. However, we expect councils that adjust the base costs using these factors to provide appropriate evidence to justify their use. We have sought advice from Cardno to assist us develop evidence requirements for these factors.

The draft report provided by Cardno available on the review page of our website provides more detail about the benchmark scopes, costing and adjustment factors of the benchmarking approach, including some examples. The full set of benchmarked items and costs will be released separately in November for consultation.

Draft decision



4. We will establish cost standardised benchmark scopes and base costs for the items listed in Table 7.1. Our approach will incorporate variation in the appropriate costs using base costs and adjustment factors.

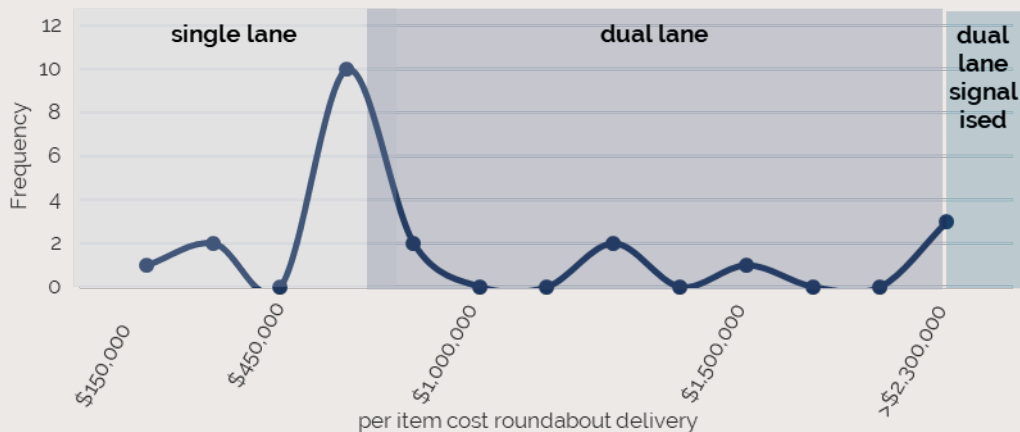
Seek Comment



4. Are there other items that we should consider benchmarking?
5. Do you agree with our approach to use adjustment factors so that the benchmarks are applicable to a broader range of projects?
6. What other factors increase the complexity of a project that could be used as an adjustment factor?

Box 7.1 Why set a benchmark range instead of a single number?

In undertaking a benchmarking exercise we need to identify a benchmark that is both, **efficient** and **cost reflective**. When we compare infrastructure costs for similar projects, we observe that cost of efficiently designed infrastructure can be variable. Consider a hypothetical distribution of roundabout costs:



Some of the variation can be accounted for using different '*subtypes*' of roundabout, (single lane, dual lane, dual lane with signals). However within these categories there is still a range of project costs. To maximise the usability of the benchmarks we want to understand the drivers of these cost variations and allow the benchmark to be adjusted if complicating factors are present.

Source: IPART

7.7 Project allowances

In addition to the individual infrastructure items, our terms of reference seek standardised allowances for inclusions such as contingency, project management and design. We are proposing to include allowances for these items at a project level rather than for each infrastructure item.

We propose to include project management and design in a 'Council on-cost' allowance, which would also include internal and external activities such as specialist investigations, insurances, and compliance costs. We expect that on-costs would be included in a contributions plan as a percentage of total construction costs (base costs). Cardno is reviewing data and identifying trends as part of its analysis of contract data to determine whether the same allowance is applicable for all contributions plans or whether the percentage is likely to reduce as construction costs increase. Cardno has recommended the on-costs rates outlined in **Table 7.3**.

Table 7.3 Proposed on-cost rates

On-Cost	Small Program \$250,000 to \$1M Construction Cost	Small/Medium Program \$1M-2M Construction Cost	Medium Program \$2M to \$5M Construction Cost	Large Program >\$5M Construction Cost
Description	Amount (%)	Amount (%)	Amount (%)	Amount (%)
Total	22%	17%	15.0%	12.0%
Cultural Heritage (where applicable)	10.0%	5.0%	3.0%	2.0%

Source Cardno (ACT/NSW) Pty Ltd, Draft Benchmarking Items and costing Methodology, October 2021, table 7-6, p12.

Contingency is an allowance that accounts for the level of uncertainty within a project. Contingencies can cover unexpected delays to projects because of weather, unexpected underground utilities or heritage items or other interruptions to projects. Uncertainty is greatest in the early stages of a project and reduces as more accurate information about the project is known. Similarly, contingency should also reduce as the project progresses. Cardno has recommended contingency allowances as a percentage of construction costs (base costs) based on the stage of the proposal as outlined in **Table 7.4**.

Table 7.4 Contingency rates

Project stage	Open space embellishment	Roads	Stormwater
Planning	20%	20%	20%
Design	15%	15%	15%

Source: Cardno (ACT/NSW) Pty Ltd, Draft Benchmarking Items and costing Methodology, October 2021, table 7-7, p13.

Decisions



5. We recommend project allowances to applied to base costs at the rates proposed under Table 7.3 and Table 7.4.

Seek Comment



7. We seek stakeholder views on the approach to project allowances, including the rates and their application

7.8 Alternative benchmarks for open space

In our previous contributions plan assessments, councils have proposed a broad range of individual infrastructure items for the embellishment of open space. In part this is because there are a wide range of items that could be included compared with the other EWL categories. In part, this also reflects differences that arise due to the amount of open space available. We have also found in our assessments that councils are likely to plan open space in less detail at the early stages of a development and to firm up plans over time.

Taking these factors into account, we considered an alternative approach to benchmarking the embellishment of open space. To account for intensity of use in infill areas, which could require a higher level of infrastructure to meet the base level need, we considered whether a per person benchmark could be developed for open space which councils could use in their contributions plans instead of needing to include benchmarks for a large number of individual infrastructure items. The benefits of this approach might be to provide greater flexibility to councils seeking to provide a higher level of embellishment to achieve an equivalent level of amenity where land costs and population density are high and availability of open space might be low. It would also acknowledge the higher degree of uncertainty around defining base level for open space embellishment.

While the approach would improve simplicity and certainty we were concerned about the cost-reflectivity of and accountability for infrastructure delivery. Councils would still need to identify and cost of infrastructure to determine whether the per person benchmark would sufficiently cover the intended infrastructure items. Given this, we do not propose to pursue this option.

Seek Comment



8. We seek stakeholder views on alternative benchmarks for open space. Is there value in a per person benchmark? How would it work?

7.9 Land costs

Under the current infrastructure contributions system, councils include land costs in contributions plans that represent the actual costs of land the council has already acquired and the estimated costs of land it is yet to acquire. Estimated land costs are informed by valuation advice from registered valuers engaged by the council and the council's estimates of associated costs such as "just terms" compensation and legal costs associated with the transfer of title. Assessment of the reasonableness of these costs has formed part of our role for contributions plans above the relevant cap.¹⁴

As part of its review of the infrastructure contributions system the NSW Productivity Commission recommended that:

- DPIE develop a new practice note, in consultation with the Valuer-General, to guide land valuation, including assumptions and methodology, particularly for land that is yet to be rezoned and may be constrained.
- The Valuer-General prepare a methodology and publish appropriate land value indices for indexing land costs in contributions plans.¹⁵

For new contributions plans, section 7.18 of the EP&A Act allows the prescription of an indexation methodology by regulation. A Ministerial direction would have the same outcome for existing contributions plans. Separate identification of the land and works components in contributions plans would be required to apply different indices to the land and construction components.¹⁶ Under the proposed reforms, we do not expect IPART to have a role in assessing the cost of land in contributions plans.

7.10 Benchmark cost for plan administration

We will also set a benchmark cost for plan administration. This covers the cost of preparing, managing and administering a contributions plan including:¹⁷

- background studies, concept plans, cost estimation and other costs required to prepare the plan
- project management costs for preparing and implementing the plan, including for reviewing the plan, accounting for receipts and expenditures, and coordinating works-in-kind (WIK) and material public benefit agreements (but excluding project management associated with infrastructure delivery)
- the cost of consultant studies and contractors as well as council staff costs.

Plan administration costs are distinct from council on-costs that are factored into the benchmarks for other infrastructure items and relate specifically to delivery of the infrastructure projects. Costs that would otherwise be considered part of a council's core responsibilities, such as strategic planning responsibilities, are also excluded. Community consultation costs for exhibition of the draft plan may be included.

We considered these costs in our 2014 benchmarking study and adopted a benchmark equal to 1.5% of the total value of works to be funded by infrastructure contributions.¹⁸ The 1.5% was based on the following:

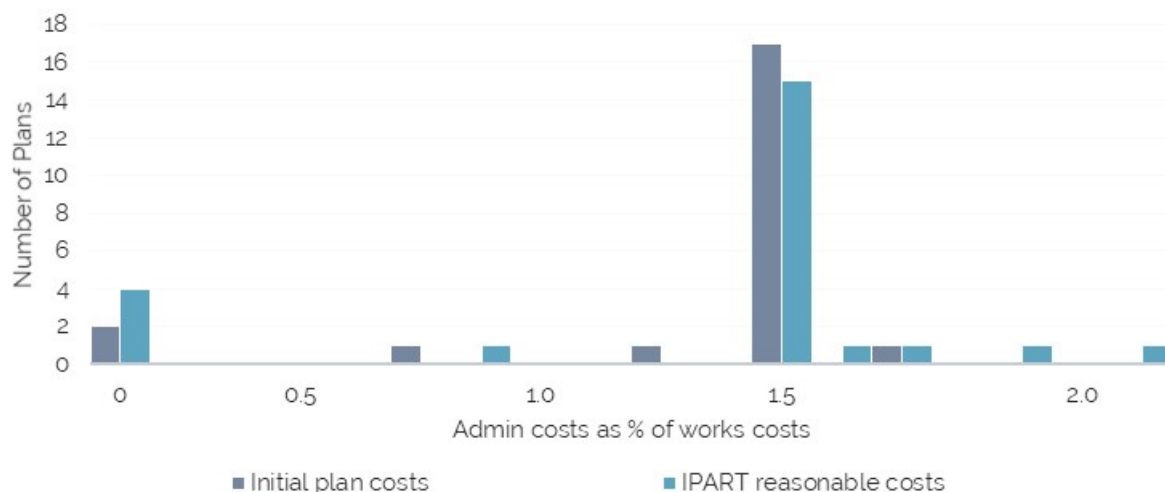
- Our review of contributions plans showed that most plan administration costs were at or below 2% of the total value of works.
- We considered that the total value of works is likely to be a strong driver of the cost of plan administration (excluding land, which may vary in value without impacting plan administration costs).
- A benchmark based on a set percentage of costs is simple for councils to apply.

- It was broadly supported by stakeholders (alongside the option to use bottom-up costing instead of the benchmark). While there was variation in stakeholder responses (some stating that 2% is too high, others that it is too low) stakeholders claiming that 2% is too low were satisfied with the option to justify a higher percentage using a bottom-up costing approach.¹⁹

Since 2014, most plan administration costs in plans we have reviewed have sat at or near the 1.5% benchmark. We analysed the last 7-years' worth of contributions plans data for plans reviewed by IPART. During this time, our approach to plan administration costs has been to consider a benchmark cost of 1.5% of total works costs reasonable unless councils have provided an itemised list of costs. Of the 22 plans we assessed, the majority used the benchmark cost percentage. Of those that chose to apply their own bottom-up cost approach these were mostly within the band of 1% to 2% of works costs. The costs vary both above and below 1.5%, are typically close to the benchmark rate and do not vary significantly across councils in NSW.

Figure 7.1 shows the plan administration costs from 22 contributions plans, showing both the initial costs as submitted by the council and the costs that were assessed to be reasonable by IPART.

Figure 7.1 Plan administration costs as a percentage of total works value



Source: IPART Calculations based on contributions plans reviewed by us between 2014 and 2021.

The data shows that in the main, there has been little deviation from our 2014 published benchmark of 1.5% of the total cost of works. This might mean that the 1.5% is an accurate reflection of the true cost of plan administration. However, there could be a number of other reasons. It may be that the benchmark cost is too low to cover all of the costs, but it is close enough that the costs of a bottom-up approach outweigh the benefits. It may mean that the benchmark value is above the true cost and as a result, councils have preferred to adopt the benchmark. Alternatively, it might be that councils have considered the 1.5% the figure most likely to be accepted by IPART in a review and recovered any additional costs through other means.

We consider that the benchmark being set too high is equally as problematic as the benchmark being set too low. Given the available data, on balance we consider it likely that the benchmark is either broadly cost-reflective for most or has driven some efficiencies and therefore convergence to the 1.5% mark.

However, our analysis relies on the contributions plans that IPART has reviewed. We only see contributions plans above the \$20,000 / \$30,000 (per lot infill / greenfield) threshold. Therefore, our analysis is based on information relating only to higher value contributions plans. To the extent that the costs of plan administration are fixed regardless of plan size, our benchmark may not be appropriate for low value plans. We are seeking further information and feedback from stakeholders so that we can further consider this issue.

This benchmark should be reviewed over the medium term based on more detailed information. More detailed data can help establish a better evidence base for future decisions about the level of the benchmark, as is likely to be the case for most benchmarked items. For more on our approach to updating benchmarks over time, see chapter 8.

Draft decision



6. The benchmark cost for plan administration should be set at 1.5% of the total value of works to be funded by local infrastructure contributions. This should cover the total costs of plan preparation, management, and administration.

Seek Comment



9. Does 1.5% of the total value of works excluding land broadly reflect the actual cost councils face to administer a contributions plan? If not, what percentage would better reflect the actual cost councils face?
10. What other types of information or data would provide a clear evidence base for the true costs of plan administration?

7.11 Benchmark borrowing costs

The Productivity Commission noted that there is often a mismatch between when the infrastructure is needed and when it is provided by councils. This is partly because infrastructure contributions are paid by developers late in the development process and councils wait to receive the money before spending it. The Productivity Commission noted that borrowing to forward fund infrastructure could address this issue but is underused by councils.²⁰

We have developed a benchmark borrowing cost for councils to include in contributions plans that would allow them to levy the cost of interest on debt used to forward fund the infrastructure in a contributions plan. We propose to set the benchmark cost of debt using the same method we use for other industries we regulate, which is the sum of our estimate of the nominal risk-free rate and a debt margin. We typically set the cost of debt as the midpoint between our estimates of the historic and current cost of debt.

The elements of our proposed benchmark are:

Nominal risk free rate (the rate of return of an investment with no risk or loss) – to be estimated using the yields of 10-year Commonwealth bonds

Debt margin (additional amount above the risk-free rate that is needed to compensate lenders for the risk of an investment^j) – to be estimated using the spread between 10-year Commonwealth and NSW TCorp bond yields plus the mid-point of the spread between 10-year NSW TCorp and A rated non-financial corporate bond yields..

For councils, the debt margin should reflect the likely cost charged to councils to borrow funds. Since we cannot directly estimate this benchmark for the local government sector, we propose to use a proxy based on a benchmark credit rating.

We considered the yields on credit-rated non-financial corporate 10-year debt (ranging from A+, A, A- to BBB) and the yields on government 10-year debt (ranging from AA+ to AAA). We have assumed that councils that would want to issue debt would be both well managed and financially sustainable, so a higher credit rating is likely to be appropriate.

Unlike a corporate entity, a council has compulsory taxation powers, which makes it more likely to remain able to meet its financial commitments in response to the adverse effects of changes in circumstances and economic conditions. Those compulsory taxation powers are not as strong as those of the NSW Government, so we consider that a typical council would have a high credit rating but that it would be lower than that of NSW.

Councils are not able to issue their own debt instruments and instead must rely on debt facilities from either NSW Treasury Corporation (TCorp) or from private financial institutions. These providers must lend to the council at their own credit rating (that is, the rate at which they can issue debt) plus some margin to cover costs.

It is our standard approach to use a trailing average to calculate the cost of debt.²¹ We consider that the trailing average method is also appropriate for the benchmark cost of debt. In simple terms, we assume that the debt is split into a historic portion and a current portion. The trailing average approach for calculating the historic portion consists of 10 equal tranches of debt each of which has a 10-year term, but the maturity dates are staggered so that one tranche matures each year. This reflects an efficient debt strategy designed to minimise refinancing risk.

The trailing average approach for calculating the current portion follows the same approach as the historical portion. However, the current portion consists of only 4 equal tranches of debt. We have set the current period at 4 years to be consistent with our recommended contributions plan review timeframe of 4 years. **Table 7.5** shows an example of the benchmark cost of debt sampled to the end of September 2021.

^j This margin takes into account the probability of default by the borrower and the duration of the debt. For the businesses IPART regulates, we apply a benchmark debt margin to all businesses in a given industry sector. We also include an additional 0.125% margin for debt raising costs.

Table 7.5 Calculating the benchmark cost of debt sampled in September 2021

Relevant rates	Commonwealth 10-yr bond yield (%) ^b	NSW TCorp 10-yr yield (%) ^b	Corporate A-rated 10-yr yield (%) ^b
Current cost of debt ^a	1.40 ^c	1.80 ^c	2.50 ^c
Historic cost of debt ^a	2.40 ^c	2.80 ^c	3.80 ^c
Midpoint	1.90	2.30	3.15
Calculating the cost of debt			
Commonwealth 10-year bond yield (mid-point)	1.90		
+ Spread between Commonwealth and TCorp bonds	0.40		
+ Half of the spread between TCorp and A rated bonds	0.425		
+ debt raising costs	0.125		
= Cost of debt	2.85		
Cost of debt (rounded to 1 decimal place)	2.9		

a. We use a trailing average to calculate the historic and current cost of debt. The historic cost of debt consists of 10 equal tranches of debt for a 10-year period and the current cost of debt consists of 4 equal tranches of debt for a 5-year period.

b. For each tranche of debt, the Commonwealth 10-year bond yield is based on 40 trading days of data, the NSW TCorp 10-year bond yield is based on 40 trading days of data and the non-financial corporate A-rated 10-year yield is based on 2 months of data.

c. The bond yield values are all rounded to 1 decimal place to be consistent with the corresponding inputs in the primary WACC calculation.

Note: The periods over which the trailing averages are calculated are to 30 September 2021.

Source: Reserve Bank of Australia, Statistical Tables F2 (Commonwealth 10-year bond yield & NSW TCorp 10-year bond yield), F3 (non-financial corporate A-rated 10-year yield).

Changing market conditions are likely to require the cost of debt to be updated more than once a year. We propose to provide DPIE with information to enable them to update the benchmark cost of debt as needed. We would also publish this on our website with guidance material so that stakeholders can apply IPART's trailing average method to estimate the benchmark cost of debt to inform their own decisions.^k We expect that councils would use the applicable benchmark at the time they borrow funds and would update this on a four-yearly basis.

^k All data needed to estimate the benchmark cost of debt is publicly available from the statistical tables published on the Reserve Bank of Australia's website.

8 Process for updating the benchmark costs over time

The Productivity Commission recommended that IPART develop and ***maintain*** standardised benchmark costs for local infrastructure. We consider two types of activities will assist us to maintain and improve the system of benchmarks we have developed and ensure they continue to be useful and current.

We will maintain benchmarks by completing a more frequent update and a regular but less frequent review. An update will be completed annually, to escalate the benchmark costs to ensure they continue to keep pace with cost increases. A regular but less frequent review will be a more comprehensive activity to consider the benchmark scope and whether it continues to reflect changes to standards, current practice or technologies, and other changes or emerging industry trends.

We consider that we should complete these activities and provide a report detailing our findings on the IPART website, as well as work with DPIE to ensure the online tools are amended to reflect the latest costs.

8.1 Cost escalations

IPART's annual update to the infrastructure benchmark cost base is important to ensure the accuracy of contributions plans. IPART will annually update the infrastructure benchmarks to escalate the base benchmark cost with a suitable index to ensure that the benchmarks keep pace with annual changes in costs of construction.

When a council prepares or updates its contributions plan it should ensure it is using the most recent benchmark rates issued by IPART, which should also be annually updated using the online tools developed by DPIE.

Cardno has recommended publicly available construction-based indices published by the Australian Bureau of Statistics (ABS), consistent with our previous recommendation (**Table 8.1**)

Table 8.1 Recommended indices for cost inflation

Benchmark category	Recommended cost index
Transport	ABS PPI Road and Bridge Construction Index for NSW (no. 3101)
Stormwater	ABS PPI Road and Bridge Construction Index for NSW (no. 3101)
OpenSpace	ABS PPI Non-Residential Building Construction Index for NSW (no. 3020)

Source: Cardno (ACT/NSW) Pty Ltd, Draft Benchmarking Items and costing Methodology, October 2021, table 9-1, p16

A targeted industry index such as the ABS Producer Price Index for NSW for non-residential and road and bridge construction should improve the accuracy of benchmarks in between reviews, reflecting the cost escalations of a narrower set of inputs more relevant to the categories of infrastructure delivered by councils in a given year.

Cost escalations will only be applied to the base costs for infrastructure, and will not be applied to adjustment factors, on-costs, contingencies plan management or borrowing costs. These categories of costs are defined as a percentage of construction costs (with the exception of borrowing costs) and will increase proportionally.

The PPIs above could also be applied to site-specific cost estimates in plan updates. (See chapter 10 below).

We propose to issue the first benchmark update in July 2022.

8.2 Benchmark review

Regular reviews of the benchmark scope (including standards, inclusions and exclusions) are also required to maintain the benchmarks and ensure their accuracy.

Over time the components of the standardised benchmark scope are likely to change, resulting in changes to cost of providing base level infrastructure. These changes can result in both increases and decreases in costs, and if benchmarks are to remain cost-effective and usable, these types of changes should regularly be incorporated into the typical scope.

Examples include changes to industry standards, safety or environmental regulation or changes in climatic conditions which typically act to increase the cost of infrastructure delivery. Conversely, there can also be changes to technology, industry practice or new and innovative materials, which can often act to reduce the cost of infrastructure delivery.

Further, the set of benchmark items should also be considered in these reviews to ensure it continues to reflect items on the essential works list, that are relevant to council's needs. As described in section 7.10 above, this review should include the plan management benchmark, to ensure that it remains appropriate for all plans.

Good quality field data will improve the effectiveness of benchmark reviews and will help to refine the benchmarks' accuracy over time. There is no current reporting or data collection mechanism that is required under the current framework. We consider that a consistent data collection approach, for base level actual costs for development contingent infrastructure, would provide the data required to improve the accuracy of the benchmarks over time. The online tools being developed by DPIE for the creation and review of contributions plans may be a simple and efficient mechanism to also collect post construction data for this purpose.

Trends in recent contributions plans are other useful sources of intelligence to consider in reviews, particularly reviews of plans using the site-specific cost estimating approach or updated contributions plans that use actual data. Reviewing the reasons that benchmark costs were not used could further help to refine the benchmarks.

8.2.1 Review frequency

Reviews of benchmarks are time consuming and should occur at a frequency that is proportional to expected changes in the industry. We consider that a 4 year interval is appropriate, and should provide enough time to test the new set of benchmarks and obtain feedback and data. However we acknowledge that the benchmarks may require more frequent review in the early years of the reformed system. As the system of benchmarks matures the time between reviews may be extended. We will monitor the use of benchmarks and stakeholder feedback and may review some benchmarks sooner if we identify issues with some items or categories.

We propose to undertake our first benchmark review before 31 December 2025.

Draft decision



7. IPART should annually update the benchmarks to account for cost escalations using the ABS Producer Price Indexes for construction in Table 8.1, and publish the escalated benchmarks on its website.
8. IPART should review the set of benchmarks no less frequently than every 4 years and should carefully monitor the use of benchmarks in contributions plans to determine if an earlier review is required.
9. IPART should work with DPIE and councils to establish a mechanism for obtaining actual project costs to refine the benchmarks.

Seek Comment



11. We seek views on our proposed approach to annual escalations and 4 yearly reviews of benchmarks, including the choice of index and timeframe.
12. We seek views on an appropriate feedback or data collection mechanism to obtain reliable and consistent project information to refine the benchmarks over time.

9 Costing approach as an alternative to using benchmark costs

There may be circumstances where benchmark costs do not provide the most accurate estimate of the efficient costs of base level infrastructure in a contributions plan. This could be for example, because the relevant benchmark does not accurately reflect site-specific features or circumstances of the plan's infrastructure, or because actual costs have become available once construction has commenced.

Where a costing approach other than the benchmarks can provide a more accurate estimate of the efficient costs of base level development contingent infrastructure, and the council can provide information to support this, using the costing approach may be more appropriate.

9.1 When would councils use a costing approach rather than a benchmark cost?

To signal the cost of providing infrastructure for a development, contributions plans should include a reasonably accurate estimate of the efficient costs of the base level development contingent infrastructure that is required. We expect that in most cases, councils will be able to use the benchmark costs for infrastructure items. We are aiming to provide enough variation in those benchmark costs to capture differences in cost due to location, topography or type of development.

However, there will be instances where the benchmarks we have developed are either unsuitable or unavailable. In these cases, it is better if councils can develop their own estimates as it will better signal the cost of providing infrastructure to developers.

Circumstances that could require a site-specific cost estimate could include:

- where factors such as poor ground conditions, contaminated land or a greater level of service relocations necessitate works that are significantly different from those listed in the 'key scope of work inclusions'.
- Where infrastructure or site circumstances are unique or more complex than the scope in the benchmarks.
- Where additional items are necessary for the project. Items listed under 'exclusions (may reasonably be required)' are items which have not been allowed for under the benchmark costs. If they are required they should be costed separately. Some of these items have been benchmarked separately, others have not been benchmarked.

Site-specific cost estimates should reflect efficient, base level expenditure consistent with the approach we have taken in developing the benchmarks.

We expect that councils will have an incentive to use the benchmarks where they provide a reasonable estimate of the costs of providing infrastructure as it will be costly for councils to develop their own estimates.

9.2 Principles councils should follow when developing their own cost estimates

We recommend that the principles for selecting and applying a costing approach should be:

1. Contributions plans should include benchmark costs unless the council has reason to believe that the benchmark would not provide a reasonably accurate estimate of the efficient costs of base level development contingent infrastructure.
2. If the council intends to use an alternative cost estimate rather than use one of the benchmark costs, the scope and performance outcomes of the infrastructure item should be the same as the benchmarked estimate unless the council can demonstrate that the altered scope and/or outcome is consistent with base level infrastructure.
3. Councils should take a symmetric and proportionate approach to replacing benchmarks with alternative costings so that a council would replace a benchmark where the alternative approach would lead to a materially more accurate cost estimate than the benchmark, whether that estimate is higher or lower than the benchmark.

We expect that councils who do not use the benchmarks would either adopt a site-specific estimate of efficient costs or would base their estimates on their own historical cost for a similar item that reflects the circumstances or infrastructure scope being proposed.

Any use of actual or historical costs should reflect:

- the scope and performance outcomes of base level infrastructure
- the most cost-effective way of achieving the required base level infrastructure outcome
- where possible, the result of competitive procurement processes (i.e., market tested costs)
- the stage of development or cost estimation process (e.g., contingency allowances should generally be lower the further along the infrastructure planning process, and be zero beyond a certain point in the infrastructure planning process or gateway)

A critical part of the process is ensuring that the council has followed the principles of nexus and base level efficient design set out earlier in this report. This involves councils identifying an appropriate performance outcome for the base level infrastructure item for which developers can reasonably be expected to pay infrastructure contributions. They should set the minimum scope of the base level infrastructure item to meet the appropriate performance outcome and a typical scope of work to deliver the base level infrastructure item. This should incorporate any relevant site-specific information which may depend on the stage of the project (e.g., site preparations, levelling, drainage, surveying, traffic management).

Ideally cost estimates should be based on competitively procured tenders for the specific project or infrastructure item in question. However councils are unlikely to have tender results for a large proportion of their infrastructure items when preparing contributions plans. In the absence of such direct market information, we propose that councils follow the principles set out in **Box 9.1**.

Box 9.1 Cost estimation approach for items not competitively tendered

Councils should determine an efficient cost estimate for that item using a suitable costing method and the most accurate available information. This methodology could be:

- **Bottom up:** building cost estimates from the list of resources (unit cost or price x quantity) required for the project – including plant, labour and materials, with productivity assumptions applied to labour and plant costs. Costs should be based on market prices or market sourced data where possible (e.g. they may be supported by quotations from suppliers/contractors for all or part of an activity).
- **Top down:** taking the cost of a similar item delivered at a specific place and time and making relevant adjustments to take account of the different circumstances in which it is now to be delivered. This can be applied at the project or component level (e.g. drawing on a 'library' of recent projects and expenditure items).

When using either method, market costs and prices (e.g. tender prices from competitive procurement processes for recent and comparable infrastructure projects or items, or prices observed in the market) should be used where possible, to ensure costs are efficient.

After estimating the base cost of an infrastructure item, councils should then include a contingency allowance as recommended for the benchmarks. The contingency allowance should relate to the stage of project planning, with lower contingencies the further advanced a project or infrastructure item is through the planning process and various gateways.

If drawing on a library of recent projects, the council should explain the adjustments it has made to the costs of a recent comparable project or infrastructure item to apply it to the contributions plan or why it considers no adjustments are necessary.

9.3 Governance arrangements required to support the use of these costing approaches

To support the principles outlined above, we suggest the following governance arrangements around the use of specific estimates or actual costs:

- When using a specific estimate rather than a benchmark cost and the estimate is higher than the benchmark, the onus should be on councils to justify and explain:
 - why the costing method and information used by the council generates a more accurate estimate of the efficient costs of base level infrastructure than the benchmark
 - why the performance outcomes and scope of the estimate are consistent with base level infrastructure. Cost estimates should relate to the same outcomes and scope as benchmark items, unless the council can demonstrate that they do not account for the site-specific conditions or no longer reflect base level due to, for example, changes to regulatory requirements or industry standards
 - the differences between the council's estimate and the benchmark showing that the difference in the cost estimate is material.
- Councils should include information on their actual costs of infrastructure in plans once they are available (e.g. once infrastructure has been competitively procured and delivered). This should include:
 - mapping actual costs to infrastructure items in the plan (councils should have a good understanding of their actual delivery of infrastructure against the contributions plan, and of the costs of this infrastructure)
 - the processes and governance arrangements the council employs to ensure actual costs are efficient and reflect market tested outcomes (including its procurement processes, and arrangements around infrastructure delivery).
- The level of information and justification provided by a council on a cost estimate it has derived, and the process related to these, should be proportionate to the size of the cost in the contributions plan and the estimated size of the cost difference between the benchmark cost and council developed estimates. For larger costs, this may require specialist reports.
- The appropriate time to replace a benchmark cost with a site-specific estimate/actual cost is at a periodic comprehensive review of the plan (see chapter 10) – unless there is a strong case otherwise. This is to minimise administration cost and uncertainty and strike a suitable balance between these objectives and cost-reflectivity.

9.4 Councils need to demonstrate the costing approach was followed

The council should provide an outline of its method for estimating costs including an explanation of why and how the costing approach is a more accurate estimate of the efficient costs of the base level infrastructure than the benchmarks. This will strengthen external scrutiny of the council's approach and assist in holding it to account, enhance stakeholder understanding and reduce the likelihood of dispute or need for regulatory intervention. It could also improve benchmarks over time if such information is considered at each periodic review of benchmarks.

Any outline should include an explanation of:

1. How the performance outcome and scope of the cost estimate is constrained to base level infrastructure – including comparing the performance outcome and scope of the estimate to that of the relevant benchmark and explaining/justifying any differences
2. How the council has assured itself that the costs it has estimated to deliver base level infrastructure (subject to the above outcome and scope) are efficient – including the source of its cost estimates
3. Any additions or alterations to base cost estimates – such as a contingency allowance, and how these relate to comparable elements of the equivalent benchmark
4. How the council has obtained and applied market-based cost information to derive its costs estimates – including its processes around this (e.g., its competitive procurement processes).

For larger infrastructure projects or items, or groups of specific items, this could be supported by specialist consultant reports. The onus would be on the council to use all available information to explain why and how its estimate is a more accurate reflection of the efficient costs of base level infrastructure than the equivalent benchmark.

Draft decision



10. We recommend that councils provide appropriate justification, consistent with the principles described in chapter 9, when using cost estimates instead of benchmarks.
11. We recommend that councils use either a top down or bottom up approach to estimating costs that uses the most accurate information consistent with the methods described in chapter 9.

Seek Comment



13. Are the proposed principles and information requirements for councils using an alternative costing approach adequate? Should councils be required to provide any further information to justify deviations from the standard benchmark costs?

10 Updates over the life of a contributions plan

Once developed, contributions plans can last for over a decade as development in the designated area progresses. Once a contributions plan has been prepared using benchmarks or cost estimates it will require updating over its lifetime to maintain currency and ensure the costs in the plan continue to remain cost reflective. This could include updating the plan at an appropriate frequency to include the most recent benchmarks. It could also include updates to use actual costs (if construction has commenced), site-specific estimates or revised population estimates, consistent with current practice.

10.1 Balancing the need for accurate cost recovery and certainty of costs

Substituting actual costs or site-specific estimates for those initially in the plan helps to improve the accuracy of base level infrastructure costs recovered by councils. Cost-reflective charges are important for signalling to developers the costs of developing in different areas and thus help to ensure that development occurs where benefits exceed costs. They also ensure that developers pay for the capital costs of development-contingent local infrastructure, in line with the impactor pays principle.

However, as outlined by the Productivity Commission's report, certainty of infrastructure costs is also important so that developers and landowners can understand their obligations and factor them into decision-making from when a contributions plan is first made.²² Reducing the frequency of plan updates also keeps administration costs for council to a minimum as there is a cost to updating the plan.

With the need to balance the above principles in mind, the Productivity Commission report recommended that councils review their contributions plans every 4 years (or earlier if required).²³ This is broadly consistent with the frequency of pricing/charging reviews in other infrastructure sectors such as water and energy (4 to 6 years), with IPART's recommendations for contributions plans that it has reviewed in recent years (3 to 5 years),²⁴ and with the 2005 Development Contributions Practice Note ("at least every 5 years").²⁵

10.2 Principles for reviewing plans and updating costs

We propose a principles-based approach to updating contributions plans that ensure plans maintain currency and allow councils to recover efficient, base level costs for items on the essential works list, for which they have established nexus to the development. We recommend that councils apply the following principles when reviewing contributions plans.

Table 10.1 Guiding principles for determining when to update plans

Principle	Examples
1. Updated costs should only reflect the efficient cost of meeting required performance outcome	<ul style="list-style-type: none"> As when initially preparing the plan this requires a clear understanding and documentation of required outcomes, consideration of viable options to achieve these outcomes, and selection of the most efficient option. If there has been a change in required performance outcomes and/or the scope of infrastructure required (e.g. due to changes in regulatory requirements, industry standards, or impacts of the development), the council should clearly explain and justify the reasons for the change. Benchmark costs assume efficient design and delivery and updating a plan with the latest benchmarks would achieve this principle.
2. Actual costs should reflect optimal design and best practice.	<ul style="list-style-type: none"> Actual costs should reflect the optimal design or configuration of infrastructure required to meet appropriate performance outcomes, and the outcomes of best practice competitive processes to procure the efficient delivery of infrastructure to achieve these outcomes. Actual costs should not be used where they include decisions of council to deliver infrastructure at a higher level, or where it was not subject to a competitive process.
3. Councils should provide proportionate explanation and justification for any increases to their costs as a result of plan reviews.	<ul style="list-style-type: none"> For example, if a cost update has a material impact on the level of infrastructure contributions, councils should explain the basis for the cost update, why it is higher than the previous estimate or benchmark and provide sufficient information to demonstrate that it is efficient.
4. Council should update for material increases and decreases in costs	<ul style="list-style-type: none"> Updates to plans should reflect both cost increases and decreases, relative to initial estimates/benchmarks. This suggests that over time, councils should increase and decrease costs, in updating a range of cost items. If councils are only increasing costs in updates, it may be a sign that the updated cost estimates or benchmarks need refining.
5. Any contingency allowance for an infrastructure item should be adjusted to reflect the stage of project planning.	<ul style="list-style-type: none"> Contingency allowances should reflect the level of project uncertainty, as the project planning moves through planning stages, the level of uncertainty around costs infrastructure needs, designs and population should become more certain and the contingency allowances should reduce. When councils are virtually certain of costs, contingency allowances should not be used (for example when site studies and detailed design have been put to tender or if construction has been completed. Further, a contingency allowance should reflect the 'most likely cost outcome' and avoid double counting of risk with the base cost estimate.
6. Development should pay no more than its share of efficient costs (based on nexus and apportionment principles) and councils should not over-recover their efficient costs over the life of a plan.	<ul style="list-style-type: none"> Future development should not pay to fund any under-recovery arising from the actual costs of providing infrastructure for earlier development being greater than initially forecast. E.g. under recovery from the earlier stages of development should not be recovered from later stages of development.

Councils should maintain evidence to be able to map an original contributions plan to a revised plan and clearly explain the sources and reasons for any material changes to costs and developer contributions. In order to demonstrate that the above principles have been followed, we recommend that councils be required to provide the following information upon updating costs in a contributions plan:

- How the performance outcomes and scope of infrastructure underpinning their specific estimates or actual costs relate to benchmarks, and the reasons for any differences
- How the components of their cost estimates and actual costs relate to the components of benchmark costs that were originally used (e.g., direct costs, share of overheads, any contingencies), ensuring that delivery of non-base level infrastructure, or inefficient procurement or delivery has not been included in actual costs used for updates

3. How they have accounted for risk or uncertainty in their specific cost estimates, given their stage of infrastructure planning/delivery
4. The process they have followed to generate their specific cost estimates and how they have ensured these estimates are efficient
5. The process they have followed to ensure their actual costs are efficient, including being based on efficient design
6. Whether there are any infrastructure items for which the council has specific estimates or actual costs, but for which it hasn't replaced benchmarks with these figures at a contributions plan update and the reasons why.

Seek Comment



14. Are the proposed principles for reviewing plans and updating costs adequate? Are there any principles that should be removed from or added to this list?



15. Are the proposed information requirements for councils enough? Are there any other pieces of information that should be added to this list?

10.3 Which plans should be reviewed and when?

Plan reviews and updates should balance a need for cost reflectivity with certainty. The effort of reviewing the plan also needs to be proportionate with the benefit of doing so. We consider there are two ways a plan may be updated to maintain currency and cost reflectivity.

Minor updates may be required to reflect the indexed benchmarks or escalate the site-specific cost estimates in line with an appropriate inflator (see chapter 8 above), ensuring plans reflect annual changes in labour and materials. We consider that all plans should be regularly updated to allow for these escalations.

Alternatively, the plan may require a more significant review to take into account more material changes to unknown site conditions or changes to the underlying assumptions of a plan.

We have considered options for which plans should be required to be periodically reviewed and updated by councils. Options include:

- Reviewing plans only by exception. Contributions plans could be updated with actual costs by exception, for example if significant changes to the plan, infrastructure needs, scope or assumptions have occurred since it was developed/last reviewed.
- Requiring only contributions plans (or items) above a material threshold to be reviewed by substituting cost estimates with actual costs. This would target administration costs to the areas of greatest benefit and promote certainty for smaller contributions plans where changes in costs are likely to be less substantial. The threshold could be related to either the contributions rate (for example, the current \$20,000 cap per dwelling or \$30,000 per greenfield dwelling) or the overall cost of the plan.

IPART's proposed approach is that all higher value contributions plans be reviewed at a fixed 4-year period. The review should aim to improve the accuracy of the plan, by updating the figures based on more up to date information. We consider this approach strikes an appropriate balance between efficiency and certainty and reflects IPART's current practice of recommending actual costs be incorporated into contributions plans if construction has commenced.

A fixed review period also promotes a symmetric approach to review, rather than councils only seeking review to increase contributions, and enhance clarity and certainty to stakeholders.

IPART's proposed process for reviewing plans and updating costs involves:

- councils relying more on benchmark cost estimates in the early years of a contributions plan
- contributions plans being updated to incorporate updates to benchmarks at appropriate intervals
- these benchmarks being gradually replaced with more accurate site-specific efficient cost estimates or actual costs based on efficient design at each four-yearly review as planning and delivery of infrastructure becomes more advanced over time.

This approach is consistent with the Productivity Commission's recommendation that benchmarked costs should be used unless a specific efficient cost estimate has been prepared or actual costs based on efficient design are determined following construction.²⁶

We also consider it important that any review of a plan does not just look to update costs to reflect the latest and best available estimates, but also reviews earlier assumptions about population, developable area and number of developable lots or dwellings, as these are key parameters in determining developer contributions.

Draft decision



12. We recommend all contributions plans above the threshold amounts (\$20,000 / \$30,000 per lot infill / greenfield) be reviewed every 4 years consistent with the principles outlined in **Table 10.1**, with appropriate evidence to support the reviews as described above.

Seek Comment



16. Do you support our approach for a threshold to determine which plans must be reviewed?
17. Do you support our proposal for a fixed 4 yearly review of contributions plans?

10.4 Updating contributions plans to reflect actual costs

When updating a contributions plan with actual costs, councils need to carefully examine the components of the actual costs, to ensure the principles outlined in **Table 10.1** are maintained. There may be many reasons why the actual infrastructure costs differ from the original estimate (benchmarks or site-specific cost estimates) initially in the plan. This may be because actual costs:

- reflect a different design decision
- are inefficient
- are higher as the infrastructure delivered is above base level (for example, to be consistent with infrastructure delivered throughout the LGA)
- are lower as a contingency allowance was not used
- reflect a revised population estimate.

Where actual costs increase significantly from benchmark or estimated costs certainty is reduced for developers who have made investment decisions based on an estimated contribution. When reviewing a plan using actual costs councils must carefully review the components of an actual cost and the drivers behind the deviation from the previous estimate. Where the deviation is driven by inefficient design or delivery, or community expectations for higher than base level costs, those costs should be excluded. In some cases, the actual costs would not provide a more accurate estimate of the appropriate base level contribution, and only benchmarks should be used throughout the life of the plan.

Table 10.2 Example timeframe for plan updates and reviews.

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
IPART	Develops benchmarks	publishes Indexed benchmarks	publishes Indexed benchmarks	publishes Indexed benchmarks	IPART publishes benchmark review	publishes Indexed benchmarks
DPIE	Benchmarks coded into online tools	Indexed benchmarks coded into online tools	Indexed benchmarks coded into online tools	Indexed benchmarks coded into online tools	Reviewed benchmarks coded into online tools	Indexed benchmarks coded into online tools
Council A	Develops contributions plan using benchmarks or cost estimate	May update plan with indexation	May update plan with indexation	May update plan with indexation	Review of plan assumptions such as population data, actual cost data and / or reviewed benchmarks	Council may update plan with indexation
Council B	-	Develops contributions plan using benchmarks or cost estimate	May update plan with indexation	May update plan with indexation	Council may update plan with reviewed benchmarks	Review of plan assumptions population data, actual cost data
Council C	-	-	Develops contributions plan using benchmarks or cost estimate	Council may update plan with indexation	Council may update plan with reviewed benchmarks	Council may update plan with indexation

Note: This hypothetical example tries to describe the review activities of a plan over its lifecycle and with respect to the IPART reviews and indexation of benchmarks. Plans may be updated, and reviewed at regular intervals, to ensure they maintain cost reflectivity.

Updates are a simpler process and only escalate the cost estimates (whether benchmarks or a site specific estimate), and may occur annually reflecting indexation.

Reviews are a more comprehensive process that should occur every 4 years and may also consider the assumptions underlying the plan, such as population estimates, actual cost data if available, or more detailed site studies to confirm the infrastructure needs remain correct.

Seek Comment



18. Does the annual update and four-yearly review provide an appropriate balance between cost reflectivity and certainty?

Appendices



A Terms of reference – Review of the essential works list, nexus and efficient design

Terms of Reference

I, Rob Stokes MP, Minister for Planning and Public Spaces, with the approval of the Premier, have entered into an arrangement for the provision of services by the Independent Pricing and Regulatory Tribunal (IPART) under section 9 of the *Independent Pricing and Regulatory Tribunal Act 1992* in accordance with these Terms of Reference.

Background

The NSW Productivity Commissioner undertook a review of the infrastructure contributions system in NSW in 2020 and made findings and recommendations for reform that were outlined in a Final Report released on 3 December 2020.

On 5 March 2021, the Treasurer and I announced that the NSW Government had accepted and is implementing all 29 of the NSW Productivity Commissioner's infrastructure contributions reform recommendations.

Recommendation 4.6: Contributions plans reflect development-contingent costs only

- i. Apply the essential works list to all section 7.11 contributions plans.
- ii. Independent Pricing and Regulatory Tribunal to review the essential works list and provide advice on the approach to considering efficient infrastructure design and application of nexus.
- iii. Subject to review by the Independent Pricing and Regulatory Tribunal, issue a revised practice note.

These recommendations included that local infrastructure contributions plans under section 7.11 of the *Environmental Planning and Assessment Act 1979* should reflect development-contingent costs only. To help achieve this, the NSW Productivity Commissioner recommended that IPART review the essential works list and provide advice on the approach to consider efficient infrastructure design and application of nexus. The objective is to ensure that new development pays the capital costs of efficiently designed local infrastructure needed to service the new population.

Matters for Consideration

I am requesting IPART deliver:

- A review of the essential works list for efficiently designed development-contingent cost to determine the contents of the essential works list. This would apply to all section 7.11 contributions plans.
- A report providing advice on the approach councils should use to determine the most efficient local infrastructure to meet the needs of new development, applying the principle of nexus.

The report should include the evidence and documentation required to demonstrate that local infrastructure included in a contributions plan is:

- contingent on development, and
- efficient in design.

In delivering the report, IPART must have regard to the following:

- The NSW Productivity Commissioner's recommendations in relation to:
 - the principle that local contributions are cost-reflective charges on impactors, applied through a consistent framework but with some flexibility for adaptation to local circumstances
 - infrastructure planning as part of the strategic planning process to encourage early identification of infrastructure needs and optimisation of infrastructure costs.
- IPART's review of the local government rate peg to allow councils' general income to increase with population and provides the flexibility for additional rate revenue being used to fund the general costs from population growth.
- The essential works list must not expand beyond the current parameters and community facilities works must not be included.
- Differential infrastructure needs to reflect geographic issues (i.e. metropolitan versus regional areas) and development typologies (infill versus greenfield).

In this section—

development-contingent costs means infrastructure costs with a causal connection to a development because they would be avoided if the development did not proceed, and includes:

- within-development open space, some roads, and pedestrian facilities
- network connections for water facilities (potable, waste, and stormwater) (*NOTE: only stormwater facilities are to be included as water and wastewater connections are dealt with under separate legislation*).
- facilities shared between multiple developments, e.g. open space and some collector roads.

Where nexus is shared between multiple developments, the relative demand each development places on infrastructure can be quantified through apportionment (being the equitable sharing of benefiting developments based on the level of demand they generate).

efficient costs means the most cost-effective means of creating assets that provide the minimum acceptable level of service.

Local Government Rating Reform – population growth factor

The NSW Government response to the IPART review of the local government rating system in NSW includes allowing for the better alignment of council income growth with population growth.

This Government policy is being implemented by:

- Terms of Reference issued to IPART to review the local government rate peg to allow councils' general income to increase with population, and
- The Local Government Amendment Act 2021 assented on 24 May 2021, which will give effect to the review.

Councils will have a reliable and sustainable revenue stream to provide key infrastructure for growing communities into the future.

Allowing for the local government rate peg to reflect population growth is highlighted as one of the key components underpinning a reformed contributions system in the Productivity Commission Review of Infrastructure Contributions. The rate peg reform enables general population costs to be removed from local infrastructure contributions.

Consultation

The reformed infrastructure contribution system will commence from 1 July 2022.

As the issues the subject of this review have previously been canvassed through the work of the NSW Productivity Commissioner, and noting the Government response, an issues paper is not required for this review.

IPART will conduct targeted consultation as part of its review including forums established to support the implementation of the NSW Productivity Commissioner's recommendations which include an External Advisory Group (comprised of peak industry and council representative bodies), an Agency Reference Group and the Department's Internal Working Group.

In October 2021, IPART will publish a draft report and conduct public consultation.

Reporting

IPART should submit its final report to the Minister for Planning and Public Spaces by 31 December 2021.

B Terms of reference – review of benchmark costs

Terms of Reference

I, Rob Stokes MP, Minister for Planning and Public Spaces, with the approval of the Premier, have entered into an arrangement for the provision of services by the Independent Pricing and Regulatory Tribunal (IPART) under section 9 of the *Independent Pricing and Regulatory Tribunal Act 1992* in accordance with these Terms of Reference.

Background

The NSW Productivity Commissioner undertook a review of the infrastructure contributions system in NSW in 2020 and made findings and recommendations for reform that were outlined in a Final Report released on 3 December 2020.

On 5 March 2021, the Treasurer and I announced that the NSW Government had accepted and is implementing all 29 of the NSW Productivity Commissioner's infrastructure contributions reform recommendations.

Recommendation 4.5: Contributions plans use benchmarked costs

Independent Pricing and Regulatory Tribunal to develop and maintain standardised benchmark costs for local infrastructure that reflect the efficient cost of provision.

These recommendations included that IPART develop and maintain standardised benchmark costs for development-contingent local infrastructure that is included in local infrastructure contributions plans under section 7.11 of the *Environmental Planning and Assessment Act 1979*. The NSW Productivity Commissioner identified that a standardised set of benchmark costs for development-contingent infrastructure would help to ensure that contributions plans are costed efficiently.

Matters for consideration

I am requesting IPART deliver a report recommending:

- Standardised benchmark costs for efficiently designed, development-contingent infrastructure on the essential works list, where the costs of that infrastructure are suitable to benchmark. These costs should cover the different transport, stormwater and open space infrastructure needs for infill, greenfield and regional development, and should reflect the base level of infrastructure that is appropriately funded by development.
- A standardised benchmark cost or costing approach for local infrastructure plan preparation and administration costs that specifies the components that are included in this cost category.
- Standardised allowances for inclusions such as contingency, project management and design.
- A costing approach that councils should use for any base level infrastructure costs that are not derived from the standardised benchmark costs.
- Differential costs to reflect geographic issues (i.e. metropolitan versus regional areas) and development typologies (infill versus greenfield) for the same types of infrastructure.

In undertaking the review, IPART should have regard to the NSW Productivity Commissioner's recommendations and guidance in relation to:

- contribution plans reflecting development-contingent costs only,

Benchmark costs

Independent Pricing and Regulatory Tribunal

Progress briefings from IPART on the 'cost structure' are required six-weekly or as requested by the Group Deputy Secretary Planning and Assessment at the Department of Planning, Industry and Environment. These will inform how costs are presented in the schedule of works.

The 'cost structure' should include the categories of infrastructure, charging methodology (such as rate per lineal metre, rate per square metre) and cost components required to be shown in the schedule of works (such as margins, approvals, contingency). The 'dollar amount' to be charged is not required as part of this review.

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- ¹ NSW Productivity Commission, [Review of Infrastructure Contributions in New South Wales](#), November 2020.
- ² NSW Government, [Response to the NSW Productivity Commission's Review of Infrastructure Contributions in New South Wales](#).
- ³ NSW Productivity Commission, [Review of Infrastructure Contributions in New South Wales](#), November 2020, p 65.
- ⁴ NSW Productivity Commission, [Review of Infrastructure Contributions in New South Wales](#), November 2020, p 65.
- ⁵ NSW Productivity Commission, [Review of Infrastructure Contributions in New South Wales](#), November 2020, p 61.
- ⁶ IPART, [Submission to the NSW Productivity Commission Review of Infrastructure Contributions in New South Wales](#), August 2020, p 6.
- ⁷ NSW Productivity Commission, [Review of Infrastructure Contributions in New South Wales](#), November 2020, p 69.
- ⁸ IPART, [Review of the rate peg to include population growth – Final Report](#), September 2021, p 1.
- ⁹ NSW Productivity Commission, [Review of Infrastructure Contributions in New South Wales](#), November 2020, p 69.
- ¹⁰ IPART, [Review of the rate peg to include population growth – Final Report](#), September 2021, p 1.
- ¹¹ IPART, [Assessment of Contributions Plan 17 – Castle Hill North](#), November 2019, pp 51-54.
- ¹² NSW Productivity Commission, [Review of Infrastructure Contributions in New South Wales](#), November 2020, p 63.
- ¹³ NSW Treasury, [Guidelines for Resilience in Infrastructure Planning: Natural Hazards](#), p 3.
- ¹⁴ In July 2020, we released on [Information Paper](#) setting out IPART's general approach to assessing land costs in local infrastructure contributions plans that councils submit for review.
- ¹⁵ NSW Productivity Commission, [Review of Infrastructure Contributions in New South Wales](#), November 2020, pp 57, 59.
- ¹⁶ NSW Productivity Commission, [Review of Infrastructure Contributions in New South Wales](#), November 2020, p 58.
- ¹⁷ This is consistent with the approach outlined in the current practice note. P&I, [Revised Local Development Contributions Practice Note - for the assessment of Local Contributions Plans by IPART](#), February 2014, pp 9-10.
- ¹⁸ IPART, [Local infrastructure benchmark costs](#), April 2014, pp 60-64.
- ¹⁹ IPART, [Local infrastructure benchmark costs](#), April 2014, pp 62-63.
- ²⁰ NSW Productivity Commission, [Review of Infrastructure Contributions in New South Wales](#), November 2020, pp 67-71.
- ²¹ IPART WACC methodology 2018
- ²² NSW Productivity Commission, [Review of Infrastructure Contributions in New South Wales](#), November 2020, p 36.
- ²³ NSW Productivity Commission, [Review of Infrastructure Contributions in New South Wales](#), November 2020, p 117.
- ²⁴ IPART, [Assessment of Contributions Plan 15 – Bix Hill Precinct](#), October 2020, p 68; IPART, [Assessment of West Dapto Contributions Plan](#), May 2020, p 93; IPART, [Assessment of Contributions Plan 17 – Castle Hill North](#), November 2019, p 72; IPART, [Assessment of Vineyard Contributions Plan](#), November 2019, p 107; IPART, [Assessment of Contributions Plan 24 – Blacktown City Council](#), August 2019, p 36.
- ²⁵ Department of Infrastructure, Planning and Natural Resources, [Development Contributions – Practice Note](#), July 2005, p 2.
- ²⁶ NSW Productivity Commission, [Review of Infrastructure Contributions in NSW](#), November 2020, p 60.